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ABSTRACT

Considered are optimal conditions for learning in the child care center serving preschool children. Discussed as aspects of learning based on real life experiences are provision for a rich environment, opportunities for learning about the world and space, learning one's way around, and learning about measuring numbers, time, days and seasons, everyday skills, common symbols, and learning how to be resourceful. Learning machines are thought to be inappropriate for preschool children. It is noted that effective learning is rewarding and leads to pride of accomplishment, that curiosity is usually a useful trait, that repetition reinforces learning, and that being accepted is one of the rewards of learning. Teachers are encouraged to use family relationships, family events, and holidays or birthdays as sources of learning experiences. Cornerstones of learning are seen to include the ability to observe and discover, to compare, to organize, to anticipate results, to solve problems, to make plans, to choose, to adapt, and to create. Prerequisites for optimal learning are given to be good health, previous experiences of success, freedom from anxiety, freedom from distractions, a flexible schedule, and the avoidance of boredom. Stressed is the importance of the home learning environment and the inclusion of parents in center activities. (DB)

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CONDITIONS FOR LEARNING

caring for children—number nine

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preface

The influence of a good child care center is not limited to the children who are cared for, the staff itself, or the mothers who participate. Older and younger brothers and sisters, friends, neighbors, volunteers may all gain from changes brought about by the child care center. In some instances, the neighborhood is brightened up, inspired by the attractiveness of the center, and pride emerges to spark new efforts. School teachers and principals, ministers, and local agencies also grow more helpful, more interested in children.

This comes from the friendliness of the center staff to the whole family and to the neighbors. It also comes from the quality of every aspect of the child care center—the cheerful setting, the good food, the well-organized space for activity, the children's progress in learning and self-control, the experience of helping to improve the center itself and the neighborhood, the resulting good feelings, and a contagious sense of progress.

At one child care center on a dirt road full of deep ruts and holes, with some adjacent yards full of junk and neighboring houses in a run down condition, major changes occurred. The city street department improved the road; the real estate agent repaired and painted nearby houses while resident owners painted their own; and volunteers from the police department cleaned up the junk. Yards bare and full of scraggly weeds were seeded and made neat. It all takes effort, but the response releases new energy.

Thus child care centers have the opportunity of providing massive help for the nation's children through contributing to wholesome physical, mental, and social development, and also to an improved environment for the children. The child in a good center all day will receive good food, exercise, and rest to build a healthy body, as well as assistance in correction of physical problems.

Through constant communication with teachers and aides, language is developed, vocabulary is enlarged naturally, thought is stimulated, and a healthy self-concept evolves. Use of toys and other play and work materials involves exercise and development of sensory motor skills, along with many concepts of color, size, shape, weight, balance, structure, and design. Stories and songs encourage integration of feelings, action, and ideas, while developing imagination.

Spontaneous play in the housekeeping corner or with blocks allows the child to play out his observations of the family and the community. Other children may broaden their ideas and skills through watching and joining in the play.

Neither health, nor adequate mental development, nor constructive social behavior can be guaranteed for the rest of the child's life if the following years do not also meet his needs adequately. But good total development in childhood can provide prerequisites for further growth and can help to prevent the beginnings of retardation, disorganized behavior, early delinquency, and emotional disturbance.

acknowledgments

I owe most to two groups of workers with young children: first, my former colleagues at Sarah Lawrence College, who taught the children at the Sarah Lawrence Nursery School—Evelyn Beyer, long time director of the nursery school, and Marian Gay, Rebekah Shuey, and also colleagues at Bank Street College for Teachers with whom at different times I shared teaching and research experiences. But in addition, I owe much to the directors and teachers of many nursery schools and day care centers across America and around the world. Especially exciting to me were the Basic Education schools of India, initiated by Gandhi and Zakir Hussain; and Bal Ghar in Ahmedabad, India—a unique integration of the best American nursery school concepts, Montessori principles, Basic Education, and some traditional Indian patterns, organized with a special balance of good structure and flexibility that I came to know as Kamalini Sarabhai's genius.

I am equally grateful to the creative staff of the North Topeka Day Care Center—Josephine Nesbitt and Forestine Lewis, who "dreamed up" the center to meet the needs of deprived children in their area; and among the intercultural group of teachers and directors, Sarita Peters, Mary Wilson, Jane Kemp, Connie Garcia, Chris Smith —each of whom had special talents in handling the children, stimulating and supporting their growth. Cecile Anderson has been especially generous in sharing her unique story—techniques, observations of children's favorite stories, and ways of looking at children's constructiveness and pride in achievement. Among the volunteers, Lillian Morrow was an inspiration to all of us with her sensitive, skillful, and quietly warm ways, and Carol Rousey contributed expert and helpful assessments of the children's speech and language development.

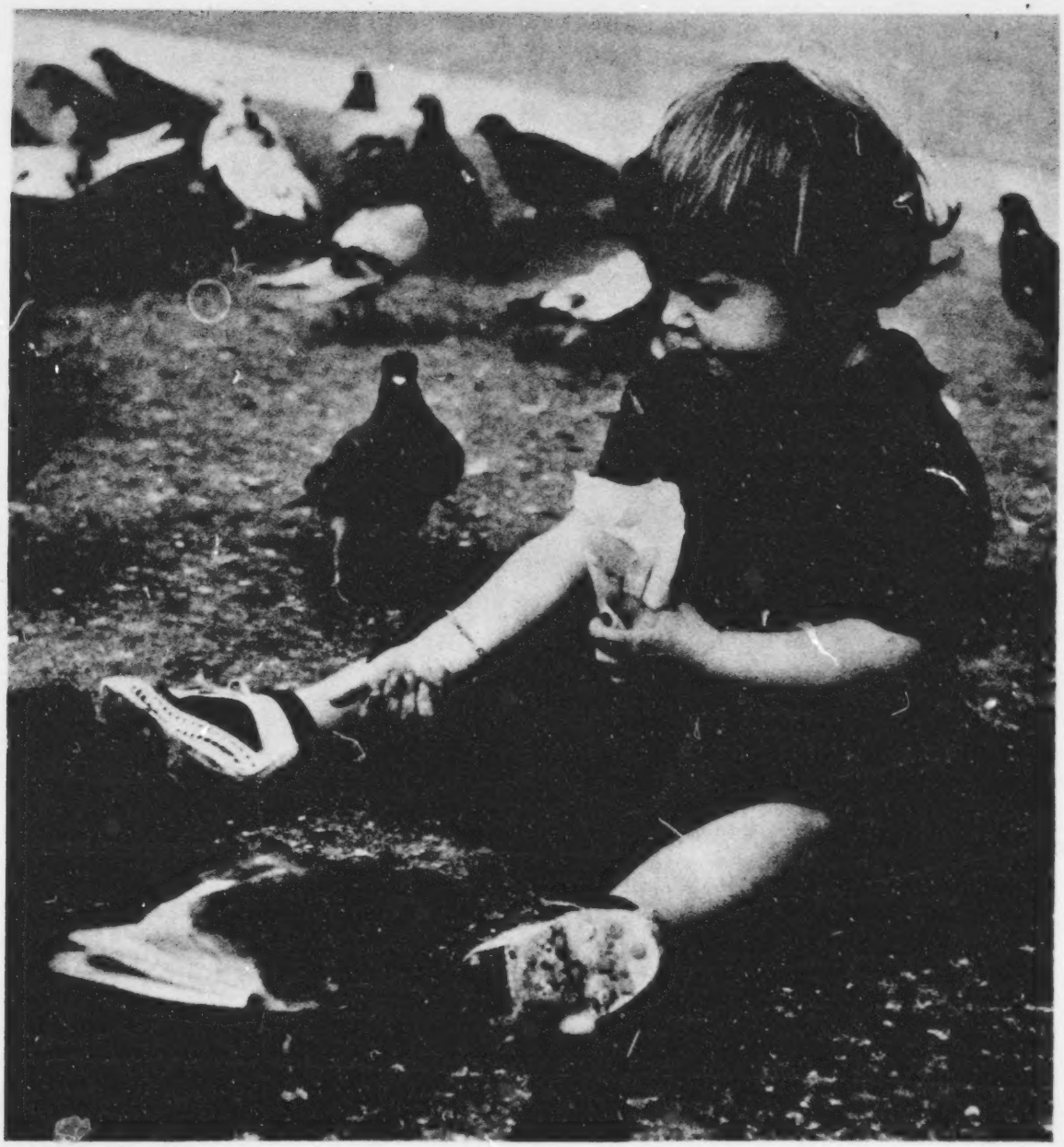
The leadership of the local OEO director, Robert Harder, and later J. A. Dickinson, stimulated staff, parents and neighbors, Girl Scouts, occupational therapy groups in local hospitals to help paint, plant shrubbery, build outdoor play equipment, provide toys so as to make possible a pleasant and well-furnished environment for learning and for total development. Shirley Norris, director of Kansas State Day Care, Anna Ransom, wise dean of Topeka day care efforts, and Mr. S. Revely, the local realtor who renovated the neighborhood houses for the Center, all gave time, energy, and warm interest to the development of the Center.

I also want to express my appreciation to the responsive mothers whose progress along with that of their children gave me a new understanding of human potentialities in children and adults of all ethnic groups in America and the urgency of making it possible for these to be expressed.

These guidelines were initiated by Dr. Caroline Chandler, former Chief, Children's Mental Health Section, National Institute of Mental Health, and were supported by PHS Grant R12-MH9266, the Menninger Foundation, and Children's Hospital of the District of Columbia. They were prepared under the supervision of Mrs. Franc Balzer, former Director of Head Start's Parent and Child Center Program.

Lois B. Murphy, Ph.D.

CONDITIONS FOR LEARNING



Learning needs a closeup look and feel.

Every year thousands of youths drop out of school because they are failing or bored. Most of them are young people of average or even high intelligence. Yet, for some reason, learning has little value to them. They cannot see how school plays an important role in their lives. They lose interest, play hookey, and fail. Graduation becomes a distant, unreachable goal.

If they can't graduate, why stay in school? They give up and drop out. In their own eyes and in the eyes of society they are failures. Many of them remain failures the rest of their days—unable to hold jobs, to accept responsibilities, to live satisfying lives.

The tragedy of our school dropouts is that most of them were born with the ability to learn. All normal babies come into the world with senses to tell them about the people and objects around them and brains to sort out and use this knowledge. A natural curiosity drives them to poke here and peer there in an effort to learn all they can. Most of the children who later fail in school are born with the same abilities as the children who succeed.

The first booklet of this series "The Ways Children Learn" discusses how normal babies are equipped to learn. The booklet states that if learnings stops as the child grows up, it is usually because the adults around the child have snuffed out this natural drive to learn. A healthy baby **wants to learn** and **will learn** if the conditions around him are right for learning.

To a little child, even more than an older child or college student, learning must be real; it must be rewarding. It must be related to the child's own world and to what has meaning to him. In order to learn, he must be healthy, rested, and alert. Little children need parents and teachers to respond to their discoveries and appreciate what they create. They need a setting which is relaxed and quiet enough so they are not constantly distracted. They need enough new experiences to be challenging along with enough repetition so that what they learn becomes part of themselves.

Children growing up under conditions like these both at home and at a child care center are more likely to enter school with a good attitude toward teachers, books, and knowledge. This booklet will look into ways that a child care center can provide the conditions that lead to learning.

learning must be real

A Rich Environment—It was the season for tent caterpillars. They had built white, cottony nests in all the trees, but seemed especially attracted to the willow tree that grew in the play yard of the child care center. Groups of children stood under the tree every day and talked about what the white stuff was. A few of the more curious ones poked the nest with a long stick and found out that the white stuff was a mass of long threads that stuck to their sticks and hands. Finally, they called teacher to show her their discovery. She explained that there were baby caterpillars inside the nest and that they would soon hatch and crawl out onto the limbs of the tree.

There was great excitement the day the first caterpillars came out. Everyone, except teacher, wanted to have a caterpillar crawl up his arm to "see how it feels." Leonore put one on

the handlebars of her trike and give it a ride. Doug and Amos got into a fight over who had found the "fat, hairy one" first, and in their scuffle the caterpillar got crushed. Nicky collected a number in a sand pail, then tried to take the trike away from Leonore so he could give his caterpillars a ride too. Teacher was able to divert his attention by suggesting that she help him count how many caterpillars he had. Georgine, who barely said a word, dropped hers. After picking it up and finding it unharmed, she happily announced, "See! Him not squished." When it was time to go inside, Kathy refused to leave her caterpillars until teacher suggested she put them in a paper cup and hide them under a bush so nobody could find them.

Teacher saw that the children were learning many things from this unplanned invasion of caterpillars. They were ready to learn more. The next day she gave each child a jar with holes punched in the lid. "We're going to see what happens to these caterpillars. First, we must see that they have something to eat. Put some leaves from the willow tree into the jar," she directed. Now put one caterpillar into your jar, and screw on the lid. We'll put all the jars on the shelf and look at them every day."

The children were able to watch the caterpillars change into moths. Then they turned their moths loose outdoors. Teacher had been able to help the children learn by taking advantage of a natural happening in their own back yard. This learning was part of their lives and was real to them.

The environment of every child care center offers different learning experiences every day. If the center is fortunate enough to have a play yard with trees and other living things, the children can learn much about nature. If the center is located in the heart of a city with only a patch of concrete for a yard, teacher will have to look for other real experiences.

Tall buildings are more a part of a city child's life than caterpillars. When workmen began to build a high-rise in the next block, Mrs. Chapman decided to make use of it as a new experience. Every week she took her children for a walk to the site. She arranged with the foreman to let them sit in the bulldozer. The children tried on the hard hats that the workers wore. They watched as the huge shovels dug up dirt, and they counted the number of dump trucks that carted it away. Mrs. Chapman explained that a tall building needs a deep foundation to keep it from falling over.

Back at the center, Mrs. Chapman showed how a block building will tumble unless there is a large block at the bottom to support the other blocks. One week the children looked through magazines for pictures of cranes, steam shovels, and other pieces of building equipment. With the help of the children's librarian at the local library, Mrs. Chapman found picture books about building houses and roads.

When the building was finished, Mrs. Chapman and the children rode in an elevator to to the top floor. "See how tiny all the houses down there look! Do you see our center? It looks like a toy from here."

Every environment is rich in learning experiences if the teacher looks for possibilities. A dandelion growing between the cracks in a sidewalk is not an ugly weed to a child. It is a delicate flower that magically turns into a lovely ball of fluff to carry the seeds.

A tree can provide many experiences: "Feel how rough the bark on this pine tree is. See how different it is from the bark on the birch tree. This bark is thin, like paper. Can you reach your arms around the trunk of this tree? Do you see any birds' nests high up in the branches? I wonder if any squirrels or chipmunks live in these trees?"

Teacher's words start the children wondering about the nature of the living things around them. If the child care center does not have trees on its property, teacher may consider taking the children to a city park. The outing may take some planning, but the experience to the children is worth the added effort.

Inside the center there are more opportunities for learning. Some children who come to a center do not even know the words for such common things as "knife," "fork," "spoon," "ceiling," "walls," "shirt," "shoes," or "pants." They may not know the materials that everyday objects are made of, like "wood," "metal," "plastic," "cotton," or "leather."

Routine jobs, like watering the plants, feeding the hamsters, setting the tables, or smoothing the cot covers help the children learn about their world.

Young children often know very little about how common objects work. Teacher may

Climbing on apparatus or simply climbing a tree helps one learn how to move his body through space, and measure distance to be safe.

play the piano several times a week, but how many children have ever peeked inside and watched the hammers hit the strings? Have they ever seen the wheels go around inside a clock? Have they ever examined the grooves in a phonograph record and learned how the needle fits into them?

There are more things to see through the windows: leaf buds beginning to open, birds carrying materials for their nests, raindrops and rainbows, leaves changing color and falling, snowflakes. "Let's put some snow in this bowl and take it inside and see what happens to it," teacher suggests one snowy day. Or in the early spring she says, "Let's follow the birds and try to find out where they are building their nest."

Learning about the things around him is an important part of a young child's life. A teacher with some imagination can turn ordinary objects into fascinating learning experiences.

Learning about the World—So many activities go on all the time in a good child care center that it sometimes is hard to pinpoint exactly what each child is learning. A visitor, for instance, may find Orlando and Jerry wearing firemen's hats and waving pieces of rope at a block building; Jan and Marie may be talking on the toy telephone; Robin, Carla, and Tommy are playing with water —Robin pouring from a cup into a pitcher, Carla bathing a rubber doll, and Tommy sailing a boat he had made from a tongue depressor; Amanda is tickling the hamster through the wire mesh of the cage; Jacque and Vicki are pasting leaves onto construction paper; and Christy is off by herself looking at and feeling some pine cones teacher had brought in that morning.

"What a confused place," the visitor might think. "How can children learn when they are so scattered?" The visitor may be unfamiliar with the ways children learn and might have ex-

pected to find a child care center arranged like a school room. Actually, many schoolrooms are no longer as formal as they used to be. In many modern schools children are free to move about and work on independent projects.

The children who were scattered into many activities were following their own individual interests and in the process they were learning about many aspects of life. Life is so complex that children have to try out many different things in order to make new learning a part of themselves.

Orlando and Jerry, the firemen, had learned how to lay out the design of their house with the first row of blocks and then how to build up the walls and leave spaces for the doors and windows. Now that their house was built, they were pretending to put out a fire in it. As firemen they were playing out what they had seen men doing in a film the day before. Any game that will help children understand why there must be a firemen, policemen, teachers, and other adults who should be respected has a place in helping children learn about life.

Most women don't have to be taught to talk on the telephone, but Jan and Marie in their telephone game were learning to use words easily to express their thoughts in everyday situations.

Splashing in water may look like an empty pastime, but actually Robin was learning about sizes (a cup is smaller than a pitcher) in addition to learning how to pour without spilling. Carla was getting some feeling for cleanliness. Tommy was learning that wood floats in water and a heavy object sinks.

While playing with the hamster, Amanda became aware of how much smaller he was than she and how much he needed to be cared for. She also learned how warm and soft fur is.

Jacque and Vicki were finding out how crumbly dry leaves are and how sticky paste is as they created their own pictures.

When Christy examined the pine cones, she learned they had separate little parts overlapping each other. They might have made her think about tall trees and green grass and other restful things, which, in turn, helped her to feel good about the world around her.

Each child care center is located in a different environment. Rural children may be well informed about where eggs and milk come from, but they may not have a clue what an elevator is. Children living in the north may know what snow and ice is like, but they may never have seen sand or a palm tree.

Even within one center the children came from different environments. Mickey is one of eleven children and runs around the neighborhood unattended much of the time. Sandy is an only child who enjoys the full attention of her parents and grandparents. Mickey can go to the grocery store by himself, but Sandy can count up to 20.

Toni's father is in prison and her mother works long hours. She is often so tired and discouraged when she comes home that she becomes angry with Toni and spanks her and sends her to bed. Albie's mother also works, but his teenage aunt spends every afternoon reading and playing with him. Toni is so used to beatings, she flinches whenever teacher raises her hand, but Albie takes for granted that teacher loves him like auntie does.

Cheap cold cream on oil cloth allows the child to create many patterns and is easy to clean up when the child is finished.

Pedro can say everything he needs to say in Spanish, but doesn't know many English words. However, his friendly manner makes everyone like him. Lawrence speaks well, but is never allowed out of his mother's sight, so he doesn't know how to play with other children without grabbing toys from them.

In each child's home different objects are familiar, different foods may be eaten, thoughts may be expressed in different ways, and the adults may display different attitudes toward life. When a teacher looks at the many backgrounds represented in her group of children, she needs to ask herself several questions about each child:

What does he know about his world?
What does he want to know?
What does he need to know?

When teacher has the answers to these questions, she can offer each child experiences that will help him learn what he needs to know about his world.

Learning about Space—Toby crawls under the table then stands up. Ouch! He bumps his head.

Marlene climbs up a tree and looks down. The ground is so far below she cries for someone to rescue her.

Sandy runs across the room. He is going so fast he can't steer around the table, and he runs into it.

Accidents like this happen every day to young children because they do not yet know how to handle their bodies in space.

What is space? The word makes us think of emptiness. We talk about spaceships and spacemen, and we imagine vast stretches of nothing with perhaps the moon in the distance. But we also say we must look for a parking space when we want to leave the car. Now the word space means a much smaller area. At the same time, a housewife may compain, "I don't have enough space in this closet." She is talking about an even smaller area.

Space is all around us. Some spaces are big, others are little. We have to know how big our bodies are and what size spaces they will fit into, just as a driver must know how large a parking space he needs for his car.

Babies begin to learn about space from the time they are born. Some babies are happy in the snug closeness of a bassinet but fuss when they are placed in a large bed. As they grow older, they learn that their hands and feet will fit through the space between the bars of the crib, but their heads won't. When they begin to crawl, they learn that some space is flat like the floor; some goes up or down like stairs; and some is filled with furniture that gets in the way. Soon they learn how to crawl up and down the steps and how to dodge furniture and in this way move from room to room.

The young child in a child care center still needs to learn more about how his body moves through space and how he can use space. Most of the games that children play outdoors help them learn these things. On a swing Rosita feels what it is like to move up and out through space. She finds that she can make herself go higher by moving her legs back and forth. But her knowledge of space is incomplete. She jumps off in midswing and hurts herself. She had learned to go high, but did not realize how far her little body would have to fall before it hit the ground. The next time she will know more about heights.

Children need to move their bodies through space in many dffierent motions to get a feeling for heights, distances, and speeds. They must climb, run, jump, roll, skip, swing, and crawl. There must be open spaces where they can let their bodies stretch and move freely and close spaces where they must squeeze their bodies as tight as they can. While stretching and squeezing, they also are learning how big a space their bodies need for comfort.

Every child care center must have some place where children can do all these things. Expensive playground equipment does not always have to be bought. Children can learn what it is like to be up high and how to get down again from climbing a tree as well as a costly jungle gym. If a helpful father can build a wooden platform or tree house on a low branch, the tree would offer a spot for games of make believe in addition to a place to climb.

Concrete animals are fun to climb and slide on, but a center with large rocks in the play yard may offer the same thing. Parents can knot heavy hemp rope to make ladders that are fastened to a chinning bar or the strong limb of a tree for children to crawl up and over and through. Lengths of concrete sewer pipe make a

Counting games are easy to master with fingers.

secret place for wriggling through or hiding in. A plank supported by two piles of bricks makes a board for climbing on, jumping off, or walking along. Old tires hung by rope to a tree make good swings.

Indoors, a few pieces of adult-sized furniture can invite children to see if they fit under the chair or to find out how far up the table top is. One center had a carpenter build a low bridge where the children could either crawl underneath or climb steps to the top and then jump off. Another center uses a small imitation tree for indoor climbing. The children try increasingly higher jumps from the limbs to a mattress below as they become more sure of the distances they can cover without falling.

To help children grasp the idea of using space, teachers can ask their advice on arrangement of the room. "Where should we put the easel this week?" "Do you think it would be fun to sit in a circle to eat tomorrow?" Room dividers on wheels allow even small children to change the appearance of the room easily. When the children all help to arrange the furniture so that a corner is open for building or a cozy nook is set aside for listening to records, they begin to realize that certain spaces have certain uses. It may help the builders remember to keep their blocks in the corner away from traffic, and it may help the children who are not listening to music to remember to keep their voices low when they play near the phonograph.

Learning Their Way Around—Children need to become familiar with the wider space around them. Many young children go directly from their homes to the bus and straight into the center without any idea of the distances involved or any landmarks on the way. Walks around the neighborhood help give the children a sense of direction and distance.

"Tim will tell us which way to go first. When we come to a corner, I'll ask someone else to direct us."

Mrs. Good and the children walked in pairs down the street. At each corner another child pointed the way. Finally, the teacher asked, "Who can show me the way back to the center?" Nobody could that day, but after many walks, the children learned to recognize the streets that led back to the center and could lead the way.

On other days Mrs. Good set out to pass the home of one of the children. "Sarita is going to lead us by her house today. Maybe we can see her dog in the yard." Although Sarita's mother was away at work, the child was pleased to show everyone the window to her bedroom and to let them pet her dog.

All young children also should know their names, addresses, telephone numbers, and the address of the center. They should also learn where to turn for help if they get lost.

Many child care centers occupy a few rooms in a larger building—a church, a community center, an apartment building. If a child happens to wander away from his room into another part of the building, he is likely to become frightened unless he has been there before. With the help of the pastor or building supervisors, teacher may be able to lead the children on a tour of the building. She can show the places where children are permitted and the places that are off limits.

On a tour of a church, for instance, she can show them the sanctuary where people come on Sundays and the organ and the pulpit where the pastor stands. She might take them to the office and introduce them to the pastor and church secretary so they will have some place to go for help if they ever become lost in the building.

Things We Measure—When young children have many different experiences handling space and objects of different sizes and shapes, they learn some basic facts about measuring. They are still too young to understand how long five yards is or how much water is in a gallon, but their early experiences will prepare them to learn about measurements when they are older.

One teacher told a story about a little girl who got smaller and smaller. To illustrate different sizes, she used a hollow doll that held smaller dolls inside. When the story was over, four dolls that looked alike except for their sizes stood on the table for the children to compare.

"Can you really get smaller and smaller like the girl in the story," the teacher asked.

"My Daddy says I'm getting bigger and bigger," declared Bruce. "Don't want to get smaller."

"Of course you don't," agreed teacher. "Real children grow bigger not smaller. Only storybook children grow smaller."

Playing with sand, oatmeal, or water

and containers of different shapes and sizes leads to discoveries about volume. A child may be surprised to find out that a tall thin bottle may hold the same amount of water as a wide flat dish. There is no need to buy containers for this kind of play. Milk cartons, plastic bleach bottles, foil trays and dishes from frozen foods, frozen fruit juice cartons, and plastic shampoo bottles may be used. Glass containers and tin cans with sharp edges are dangerous and should be avoided.

A simple balance is useful in learning about weights. The children can make their own with a plastic straw pinned through its center to a slender block. A soda bottle cap tied to each end will serve as a miniature tray to hold small objects like peas or pebbles. A sturdier balance of wood may be made by one of the parents. While using the balance, the children learn how to compare weights. They can find out, for instance that a pencil is heavier than a paper clip, and they may learn the words "heavier" and "lighter" at the same time.

Numbers—Many four-or even three-year-olds can rattle off most of the numbers from one to ten, but when asked to give someone three crayons may be unable to do it. Playing store with buttons or pebbles for money can help children see how many pieces each number stands for. The more teacher can use numbers in real situations, the more the children will feel that numbers are a part of their lives.

"You may take two crackers, Billy," or "Put five cups on each table, Marty" teacher says to the children helping her set the table for snack. In this way numbers begin to come alive for them.

Time—Preschool children are too young to learn to tell time, but they are ready to begin to understand lengths of time and time words. **"After** we wash our hands, we will have ten minutes for singing **before** lunch is ready," teacher tells the children. This lets them know before they start that the singing time is limited. It makes it easier for them to stop singing and eat lunch.

"When you come to school **tomorrow,** we will sing the same song we sang **this morning,"** she tells them, stressing some more time words. Soon the children learn the time periods of the day even if they do not know how to read a clock.

Days and Seasons—One child care center has a dead tree standing in a pot in the corner. When the leaves outside turn red, yellow, and brown, the children make paper leaves of the same colors and pin them on the branches. When the leaves outside fall, they take their leaves off. When snow covers the trees outside, the children lay strips of white cotton on the limbs of their tree. At Christmas the dead tree is covered with bright decorations. As green leaves appear on the outside trees in the springtime, the children dress their inside tree the same way.

The passing of seasons and days has meaning for young children. Their lives change with the seasons. In winter it is often too cold to play outdoors. Yet, in summer they are allowed to get wet under the sprinkler. They need to know what to expect with each season and how it affects their lives.

The days of the week also are important to children. Some teachers hang up large calendars giving the names and dates of each day in the month. Every morning teacher and children repeat the day and date. They talk about what will happen that day, or what is ahead tomorrow. In this way children learn the names of the days and, at the same time, how one day is different from another. They see that Saturdays and Sundays are not the same as other days because they don't go to the center on those days. Mondays are different because they usually have many things to tell teacher about what happened over the weekend. The old rhyme; "This is the way we wash our clothes so early Monday morning," may no longer be true in many households, but the song and actions still help children remember the days of the week.

The weather also sets one day apart from the next. Many teachers use the large calendar to record the weather. If the day is sunny, teacher asks one of the children to color a sun in that day's space, if it is rainy, someone draws raindrops. Pictures of clouds, snowmen, or leaves being blown by the wind are added to the calendar as the months go by. In some centers, the children dress a paper doll in clothes appropriate for the weather of that day—a sunsuit, raincoat, snowsuit, or sweater—whatever would be comfortable.

Everyday Skills—There are many jokes about young brides who are so unfamiliar with housekeeping tasks that they can't boil water without

Pride in a job well done contributes to a self image as a good worker.

burning it. Many young people today are growing up without knowing how to do chores that their parents learned to do as a natural part of childhood. Labor-saving appliances in the home are partially responsible for this state of affairs. It is easier today for a mother to keep house without depending on help from her children.

It is also true that many modern mothers would prefer to do the chores themselves rather than clean up after the children have been "messing around." Most children do not set out to make a mess. But small hands do not grip objects as surely as adult hands. A child who spills dishwater on the floor or misses the dustpan he is sweeping crumbs onto needs to learn more about handling different things. He may not know that the water will splash out when he drops a heavy dish into it. Or he may still have to learn how to aim the broom at the dustpan. A child care center can offer the children opportunities to do simple jobs in a relaxed atmosphere where they know they won't be punished for making a mistake.

Even though mother may discourage help about the house, a normal child still learns many everyday skills in his day-to-day living. One mother blamed the older children for leaving the cookie jar out whenever she found the two-year-old stuffing himself with cookies. Then she saw him, without help, pull out drawers to form a stairway to the top of the cupboard from where he could easily reach the cookie jar on top of the refrigerator.

A child care center can begin with the skills a child already has and build on them. The aim is to help the child learn how to take care of himself. If he can pull down his underpants but can't get them up again, it is better for teacher to show him how to do it himself rather than do it for him.

Children need practice in dressing and undressing themselves. A few mothers may be willing to sew buttons, buttonholes, snaps, zippers, and buckles on scraps of cloth to be used in learning dressing skills.

The Basic Education schools in India emphasize skills the children will need when they grow up. They plant vegetables, shred lettuce and wash green beans for lunch. In some areas they even pick, card, spin, and weave cotton into cloth for their clothes.

Some of the Basic Education ideas could be borrowed by child care centers in America. Certainly many centers could spare a small corner of the play yard for a vegetable or flower garden that the children could plant and water by themselves. A kindergarten class in one public school prepared a complete Thanksgiving feast including roast turkey, cranberry sauce, and pumpkin pies and invited their parents to eat with them. A simpler kind of meal could be cooked by a group of four-year-olds in a child care center under the guidance of a patient cook.

Some other activities to develop everyday skills might include: using soap and water to wash out the painting aprons; making a boat by hammering two pieces of wood together; using a key to lock and unlock a box or cupboard; putting records on the turntable and turning on the phonograph; winding up a toy or music box; lacing shoes; using a screwdriver to remove and return screws to a board; using nuts and bolts to hold two pieces of wood together; or operating different kinds of latches—a bolt, a hook and eye, and a chain. A father may be willing to make practice boards with hardware attached.

Common Symbols—Symbols surround us and give us signals. We drive down the street, and an **arrow** tells us what lane we should be in to turn right or left. The **traffic light** turns red and signals us to stop. We hear a **siren** and know it is a signal to pull over to the curb for an ambulance to pass by. If we become ill in a public place, we look for a **red cross,** the symbol of a first aid station. We know that a **cross** is the sign of a church, and a red and white **striped pole** is a symbol of a barber shop. Every word we read is a combination of some of the 26 letters that are symbols for sounds in the English language.

The danger of traffic, both on city streets and rural highways, makes it vital that children learn to understand the symbols around them at an early age. They must learn what the red, yellow, and green lights on a traffic signal mean. They have to know what motions a policeman or school patrol uses to signal them to stop or go. Games with one child acting as policeman and directing traffic, either with a whistle and hand motions or red and green paper signals, can help the children fix these signals firmly in their minds.

Children can practice the use of these signals as they are taken for walks across busy streets. They need to learn to look both ways before crossing, and also to recognize the markings on a pedestrian crossing. If there is a traffic island, the children should have some experience stopping there until the light turns green again.

Some adults may think such information is not necessary for preschool children who are not normally permitted alone on busy streets. Most children are both curious and agile. They can be over the fence and down the street before anyone misses them. It is best if all children know the rules of safety. Many children of five or six have to walk to school alone, so it is not too soon for them to start learning in the child care center.

Another important symbol that all children need to know is the skull and crossbones that identifies a poison. Naturally, all poisons should be kept out of reach of children, but children, with their poking and climbing, are master detectives. It is wise to tell them over and over never to put any strange substance in their mouths and to be sure they understand the **symbol for poison.**

A child who learns to associate symbols with meaning has acquired a basic foundation for learning to read when he is older.

Learning to Be Resourceful—Equipping a child care center to provide the necessary conditions for learning can be costly if the staff tries to buy everything from an educational supply house. However, many useful objects can be made or can be adapted from discarded household items. When the staff of a child care center is resourceful in using materials at hand, the children and their parents will see possibilities in using available materials as well. As the children themselves fashion useful objects from common goods, they will begin to develop satisfaction in the act of creating that may enrich their entire lives.

The section, "Learning about Space," earlier in this book, (page 10) included ideas for making large pieces of equipment. Here are some more ideas that have been used by centers:

—Children pressed autumn leaves between wax paper and attached them to a dowel suspended on wires to make a winter mobile for their room.

—Kitchen furniture for the housekeeping corner was made out of grocery boxes.

—A discovery table invited everybody to bring in things found in nature. One table included seashells, nuts, birds' nests, raw wool and cotton, stalks of wheat, wild grasses, berries, twigs with thorns and smooth twigs.

—Drums were made by stretching pieces of inner tube over a coffee can and laced in place.

—An old truck tire made a cozy sandbox.

—Children used a hose to water their garden and at the same time found out that water can be forceful or light, according to the way they moved the nozzle.

—One group of children filled a pill bottle with honey, tied a bright ribbon on it, and fastened it to their windowsill there they could watch the humming birds attracted to it.

—A walk-in nature house can be made by screening a corner of the garden to include a shrub or small tree, grass, flowers, a few birds, and a rabbit.

—Parents and teachers collected ends of lumber from housing construction sites and at woodworking parties turned out toys. The teacher also allowed the four-year-olds to hammer nails into some of the smaller pieces of wood and make boats, airplanes, and doll furniture under supervision.

Additional ideas may be found in the other books of this **Caring for Children** Series, particularly "A Setting for Growth"; **Rainbow Series Book 9,** "Equipment and Supplies"; and "Beautiful Junk," all of which may be obtained from the Bureau of Child Development Services, Office of Child Development, Department of Health, Education, and Welfare, Washington, D. C. 20013.

A child who can use many different materials can accept substitutes when he cannot have exactly what he wants.

What About Learning Machines?—In some elementary schools teachers use electronic machines to help children learn. Some learning machines give a child practice in hearing and recognizing printed words. Others drill a child in numbers and simple arithmetic.

Some teachers are looking at learning machines and wondering whether they might be helpful for preschool children. We know that many three- and four-year-olds can learn how to read if enough effort is directed to this end. If that is the

object of a child care center, learning machines might be useful. However, young children first need to learn about the real world. A word like "autumn" will have more meaning for them after they have experienced the joy of raking dry leaves into a pile and jumping in them, or collecting fallen leaves to see how many different colors they can find. A child who has cut a cupcake in half or divided a bucket of sand into several smaller containers may have an easier time later when he is expected to understand fractions.

Reading, arithmetic, and other skills children learn in school will come in time if the child has been allowed to learn about life at his own level. Teachers and parents can help best by making many different experiences available to children and encouraging them to look, listen, feel, taste, and smell everything that makes up their world.

Machines have brought us many benefits. But they also have left us with polluted water, unclean air, and a doubtful future. In racing to produce material comforts for man, we have abused nature. We look back horrified at the harm we have done. If we can instill in our children an appreciation for their natural environment and a desire to preserve it, we may be making our greatest contribution to the future of mankind.

learning must be rewarding

Pride of Accomplishment—A good feeling comes over us when we complete a job and know it is done well. If it is difficult, we feel even greater satisfaction when it is completed.

Children have the same feelings. Howard was so proud of the rocket he built that he called teacher to come and see it. Her words showed how much she appreciated his work. "That is a fine rocket, Howard. You build better things every day." Howard was encouraged to try to build a more complex structure tomorrow.

A smile, an approving nod, a few words of praise usually are enough to make a young child try hard. This is the time in a child's life when he responds most to adult interest. Later on acceptance by his friends will mean more to him, but in the early years he thrives on adult approval. It is also the time when a child's attitudes toward learning are being formed. Once he decides that there is nothing worth learning in school, it is too late to prod him with smiles and praise.

Curiosity Did Not Always Kill the Cat, It Often Made Him Smarter—Instead of being thankful that their children want to learn, many tired parents turn aside children's questions by saying, such remarks as "Curiosity killed the cat." Such an answer must puzzle a young child who needs to know many things about his world and looks to the closest grownup to supply some of this knowledge. It also tells him that grownups don't think much of his natural desire to learn.

Parents and teachers must put a child's natural curiosity to work, not only by helping him find answers to his questions, but by leading him into new areas of discovery. The teacher who built a learning experience around the caterpillars in the play yard was doing this. The excitement of discovering that their caterpillars turned into moths was the children's reward for their curiosity.

When a child asks a question, a good answer often is, "Let's see if we can find out." This way, with adult and child working together, the child discovers the answer for himself. Teacher could have told the children what would happen to the caterpillars, but by seeing it happen themselves, they were more likely to remember.

Repetition Makes a Good Experience Better—"What story shall we read today?" Mrs. Watt asked.

" 'Curious George.' 'Curious George.' "

"We read that yesterday. Let's read something else today."

"No. We want 'Curious George.' "

"I believe you children are in a rut," Mrs. Watt smiled, as she began to read their favorite story.

Children like to sing the same songs

over and over again. They enjoy doing the same puzzles. Some children would eat nothing but peanut butter and jelly sandwiches if they had their way.

Of course children have to be introduced to new things. But it is also important to repeat activities that give pleasure. Each time they hear "Curious George" they become more familiar with the words and it becomes part of them. They also understand the meaning more fully. If teacher thinks the children really are in a rut, she might read another "Curious George" book which tells a different story about the same mischievous monkey and in that way guide them to new ideas.

One teacher took her children to visit a fire station where they saw many new things. She knew they would forget much of what they saw unless they repeated the experience by talking about it and making other visits later. After naptime she showed them a book about a fire station. They pointed out how the fire engines in the book were different from the ones they had seen and how they were the same. They laughed when they discovered that the firemen in the book also had a Dalmatian dog like the firemen they visited.

A week later teacher showed them some photographs she had taken at the fire station. With the help of the pictures, the children again recalled their experiences.

"There's me with a fire hat on," Dianna pointed out.

"See the fireman on the pole," Leroy said. "Can we see the fireman come down the pole again?"

Teacher arranged another visit. The fireman again showed them how he slides down the pole to get downstairs quickly when there is a fire alarm. They all tried on the firemen's hats and tried to walk in their big boots. After the visit, teacher again talked with them about the things they saw. By repetition like this the experience of visiting a fire house became a part of the children.

Repetition not only reinforces learning, but it can be soothing as well. When Ricky came home from the hospital after a tonsillectomy, the only thing he wanted to do was to sit close by his grandfather and listen to his favorite phonograph record over and over. For two days this gave him the comfort he needed to reassure him after his unpleasant stay in the hospital. When he returned to the child care center, he gathered several girls and boys together and pretended to take out their tonsils. This play continued for a few days, then was put aside in favor of other activities. Ricky's tonsillectomy no longer worried him, and he no longer needed to repeat the experience.

A new teacher often finds the children will warm up to her faster if she sticks to familiar activities for the first few days. Later, she may introduce her own ideas without upsetting the children. When they feel they can trust her, they will trust her new ideas.

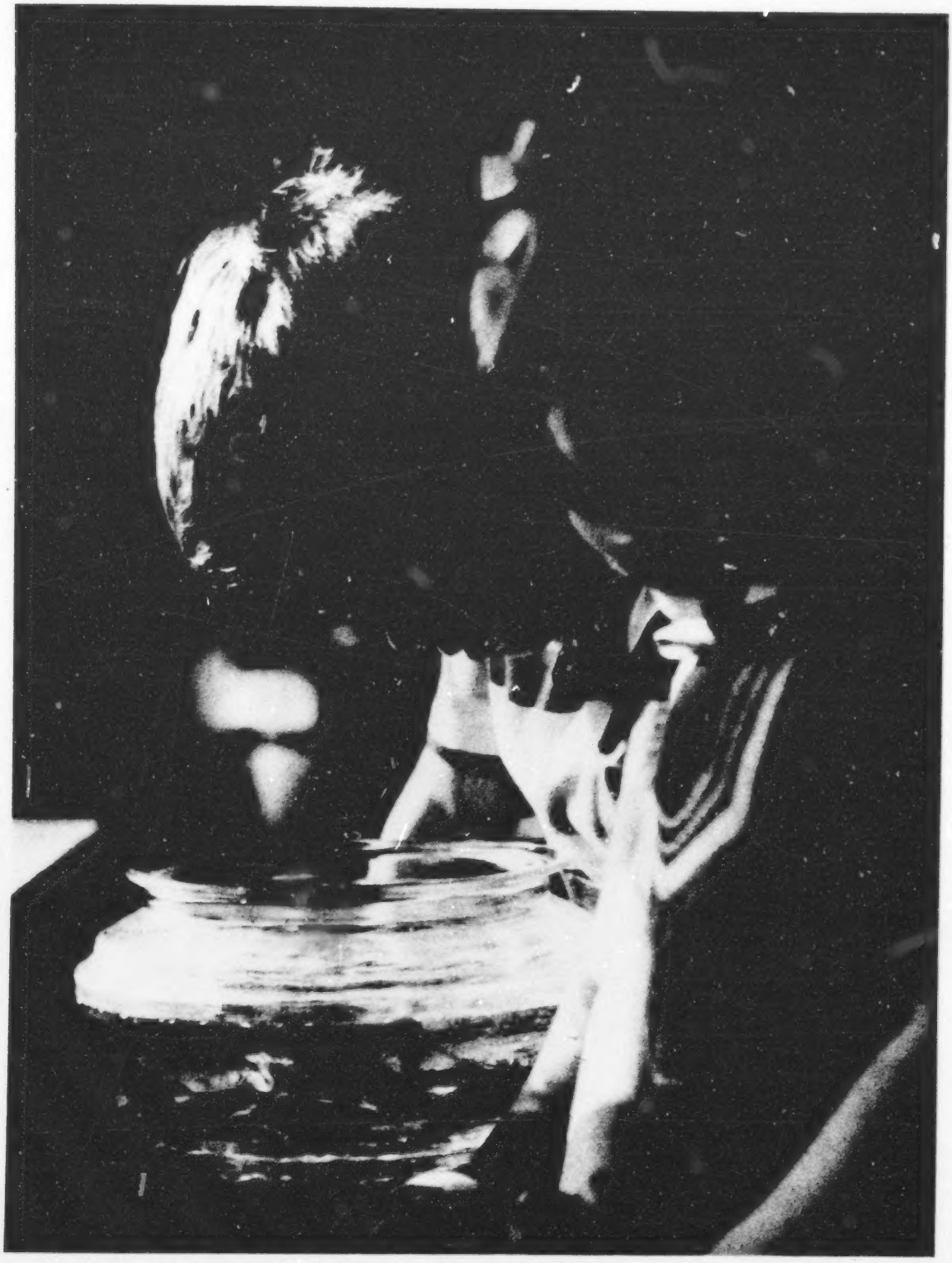
Being Accepted—in old time schoolhouses, a child who didn't know his lessons was made to wear a dunce cap and sit on a high stool in front of the class. The idea was to shame the child so that he would work harder in the future. Today the cap and stool are gone. Good teachers no longer intentionally shame a child who learns slowly. But these children still feel ashamed because they have trouble keeping up with their classmates. As they become aware that their classmates can do more than they can, they begin to feel inferior. Often the other children will taunt them cruelly with words like, "Wayne's too dumb to do this puzzle," or "Look at Althea, she's got her shoes on the wrong feet."

One of the rewards of learning is the feeling of being accepted by the group. When a child generally keeps pace with the other children, he has confidence he can hold his own in almost any activity. But the slow learner, even without a dunce cap, feels separated from the others.

Teacher must show the child who feels rejected that she still thinks he is important. While the children are doing puzzles, she can sit down next to Wayne and, with one arm around him, help him fit the pieces into place. If all the puzzles are too difficult for Wayne, she can find an easier puzzle for him to begin on.

After naptime, she can stand close by Althea's cot, ready to help the child get her shoes on the right feet before the children poke fun at her again.

In a relaxed atmosphere where the children spend a large part of their time on activities of their own choice, teacher can give individual attention to those who need it without separating them from the other children. Knowing that someone cares and wants them to be able to do the



A curious child uses all his senses to learn about the world around him.

things the other children do may give Wayne and Althea the push they need to want to learn.

building on children's lives

Family Relationships—"Were you ever little like me?" Margot asked her mother. When Mother had assured her that she certainly had been little once, Margot asked, "Who was your mommy?"

Mother was surprised. Margot visited her grandmother often, and Grandma and Margot did many things together. It had never occurred to Mother that Margot didn't understand the relationship.

"Why, Grandma was my mother when I was a little girl, and she's still my mother today."

"I know she is today," replied Margot, wrinkling her forehead and thinking very hard. "But she's too old to be a mother of a little girl like me."

"Well, she didn't have gray hair when I was little, if that's what is worrying you," smiled Mother.

Adults often take too many things for granted. They assume that Margot and other children know that grandmothers and grandfathers are mothers' and fathers' parents, or that Aunt Elise is Mother's sister and Uncle Paul is Daddy's brother. Margot may call Greg her cousin, but she may not know how a cousin is different from a friend.

If learning is going to be real for a young child, it must deal with matters that have meaning for him. What has more meaning than a child's own family? The first person a baby sees most likely is his mother. From then until he goes to a child care center, most of the people who make up his world are members of his family. It is important for a child to understand how mother, father, brothers, sisters, grandparents, aunts, uncles, and cousins all fit together in a special way that sets them apart from the other people in the world.

Teacher can help by talking about family members and how they are related to the child. "Arthur's Aunt Eunice is taking care of him while his mother is in the hospital to get a new baby," teacher tells the children. "She is his mother's sister and played with Arthur's mother when she was a little girl. Let's play a game. Shirley, you pretend you are Aunt Eunice. You've come to visit Arthur and his new baby brother. They are your nephews, and you bring each of them a present. Who wants to be Arthur's mother?" By playing the roles of aunt, sister, and nephew, the children begin to straighten out how people in their own families are related.

Family Events—Happenings within the family are important to children. They love to tell their teacher and friends about them.

"Daddy and me went to a ball game. The bat went 'pop' and the ball went like this." Jason made an arch with his arm. "I gotta ballman's hat." He proudly showed off his red baseball cap.

Marilee had a different event to report. "Mama got a cut face. Her got six stitches here." The little girl sadly traced her finger over her cheek. The car went 'bang,' and glass broke."

"We're gonna go see Uncle Teddy. Gonna ride on a big bus," Amos announced excitedly.

But Laurel looked worried when she told her news. "We gonna have a new house soon. Gotsa yard and trees and porch."

Every day teachers hear about all kinds of events that are happening in the children's homes. Some are happy; some sad; some frightening. What can teachers in child care centers do about them? These are real situations that are part of the children's lives. They can lead to learning experiences for all the children.

Jason was delighted to show the class how the batter stood and what the pitcher did during the baseball game. He particularly enjoyed telling about the big bag of popcorn he ate. Teacher wanted to use the idea of baseball for a game, but she knew young children are usually not well enough coordinated to hit a ball with a bat. Instead, she made up a game with the runner, wearing Jason's cap, running around the bases, then passing the hat on to the next runner.

Teacher had a more serious responsibility in dealing with the auto accident that injured Marilee's mother. The child naturally was worried about her mother and also scared that she too might get a cut face from riding in a car. Automobiles are so much a part of children's lives, that an accident is likely to make all the children anxious. The image of a needle and thread going in and out to close a wound may frighten young children as well.

"I'm sorry to hear that your mother was hurt, Marilee. We all hope her face will be better soon. Has anyone here ever had stitches?"

Mario spoke up. "My brother fell off his bike and cut his eye. The doctor sewed it up."

"Is he all better now?" teacher asked.

"Yep. It don't bleed no more."

"Lots of people have stitches when they hurt themselves. I had some up here." Teacher pointed to a scar on her arm. "See that mark? That's a scar where the cut was. Marilee's mother may have a scar like this after the cut is all better. Now, let's make a pretty get well card for her."

After talking about the accident and telling about similar injuries that got better, Marilee and the other children began to feel less frightened. Even bad cuts will get better if they are treated properly. Later in the day, Marilee and two other children played "accident." They sewed each other up with a lace from the wooden shoe and plastered each other with adhesive bandages. Children often feel better after they play out the situations that worry them.

Amos' bus trip prompted a game of "bus driver and passengers" with all the chairs lined up in twos behind the driver. When teacher found out that Uncle Teddy lived in New York City, she brought in pictures of skyscrapers, subway trains, ocean liners, and other things he might see. She also posted a map of the United States and drew a line showing how Amos' bus would travel to New York.

Moving to a new house and a new neighborhood is hard for a child. Even though her parents told her nice things about the house, Laurel was worried. She might get lost in the new neighborhood. There might be scary things in her new bedroom. She needed understanding adults to support her through this time.

Again, talking helped. "Laurel's mommy says there is a swing on the porch and lovely flowers in the yard. Won't that be fun? First, they have to pack all the beds and tables and chairs into a big truck. Let's pretend we're moving men. We're going to pack up all of Laurel's things. What shall we put in first?"

"Television."

"Stove."

"Plates."

The children began to name different household items that Laurel's family will take with them when they move. Teacher talked about Laurel's new house several days before the little girl actually moved. When the time came, Laurel was better able to accept the change that was taking place in her life. The other children had learned something about what it's like to move.

Booklet three of this series, "Preparing for Change," deals with moving and other threatening events in children's lives.

Holidays and Birthdays—All the main holidays and birthdays are celebrated in most child care centers. Children make paperbag masks at Halloween and trim a tree at Christmas and dye eggs at Easter. If teacher tells stories about why people wear masks or trim Christmas trees or dye Easter eggs, she can add more meaning to the activity.

Many ethnic groups have their own celebrations. Christmas for Chicano children is likely to mean a pottery or paper piñata filled with candies and gifts instead of a stocking. With the help of parents, teacher may be able to arrange a piñata party for all the children.

Chinese-Americans celebrate the coming of a new year on a different day and in special ways. Again, parents may be happy to share their holiday traditions with the other children. Each group of children in a child care center is likely to represent many ethnic groups. If teacher builds some activities around other cultures, the children will develop a wider appreciation of other people.

Birthdays are very special days. Most teachers are careful to remember each child's birthday by singing "Happy Birthday" and maybe having a birthday cake for dessert and a gift for the birthday child to take home. Some teachers write all the birthdays on the calendar so that the child can see how soon his birthday will come.

Children enjoy the attention they get on their birthdays, but how many of them know

Every child needs to feel his efforts are appreciated by adults.

why people make a fuss over them on that day and not on every other day? Teacher might explain with words like these:

"Today is Cy's birthday. He is four years old. Do you know what happened four years ago today? Well, that was the day Cy was born. He was a tiny baby then. Every year on this day it will be Cy's birthday. Even when he is an old man. All his family and friends will show they are happy he was born by wishing him 'Happy Birthday.' "

Celebrations can be real learning experiences for children, but they are much more. Children and adults need happy experiences to help them grow emotionally mature. When life is difficult, they know that there can be happy times and that there are people who care. Memories of special days are a kind of strength insurance. When life goes along smoothly, the memories lie still. But when troubles appear, memories of happier times give strength to face the problems at hand.

cornerstones of learning

Ability to Observe and Discover—"Look around the room carefully. I'll give you one minute." Teacher checked her watch. "Okay, time's up. Now everybody close your eyes. I'm going to find out how much you saw. Don't peek. See if you can remember. Are the lights on?" Most of the children agreed that the lights were on.

"What color is my dress?" One small voice ventured a shy "green," then all the children joined in shouting "green, green."

"What color are the flowers in the vase?" That was a hard question, and no one answered until Vicki remembered that she had brought some lilacs to teacher the day before, and they were in the vase. "Purple," said Vicki. "Good for Vicki," said teacher.

The game went on. "Is the television set in our room today?" "Is there a rug on the floor of the reading corner?" "Are the doors to the cupboard open or closed?"

The children were having so much fun that if anyone had suggested they were working hard, they would have laughed. For them it was fun. Yet their brains were working hard, recalling what they had observed earlier.

Observing is the first step in learning. A baby starts looking around soon after birth. Before long he turns his head in the direction of a voice. He closes his fist on everything in reach, whether it is someone's finger, a blanket, or a toy. He feels with his hands and his mouth. He tastes and smells and soon knows the foods he likes and those he dislikes. A baby finds out many things about the world by seeing, hearing, smelling, tasting, and feeling the people and things around him. Little by little he builds a store of knowledge in his brain.

As a baby grows older, he continues to observe and explore. By now the world is larger because he can crawl or walk to discover new things. He stores away more and more knowledge. These are important years. The more facts a child can store away, the more help he will have later in solving problems and making decisions.

Children can learn best when a mother or teacher helps them. When Jon finds an anthill at the side of the house and runs to tell his mother about it, she can enjoy his discovery with him. "Let's see if we can count how many legs an ant has," Mother can suggest. Or, "Look at all those ants working together to carry a crumb of bread. They must be taking it to the babies inside."

Jon sees that his mother approves of his discovery. It makes him want to find more things to show her. She could easily have killed his desire to look at new things. She may have been annoyed with him for bothering her, or she may have said, "I can't come now. I'm too busy. I'll look at it later." Too often "later" never comes, and another chance to help a child learn is gone.

Little children want to be like the grownups they love. When they see that a parent or teacher enjoys learning about new things, it makes them want to learn too.

Ability to Compare—As children learn about more things, they begin to compare one bit of knowledge with another. The next day Jon found a grasshopper. "Look, Mommy. This bug is bigger than an ant."

"That's a grasshopper, Jon. Put it down and we'll watch it for a while," his mother said. The grasshopper hopped. "Does a grasshopper walk the same way an ant does?" asked mother.

"No, it hops like this." Jon hopped.

By comparing an ant with a grasshopper Jon had learned more facts. It helped him put everything he knew about the two insects together to see how they are different.

There are countless times in a child care center when teacher can start the children on making comparisons. In the play yard or on a trip to the park she can make a game out of collecting and comparing such items as leaves, pieces of bark, grasses, or stones.

"How are these leaves alike?" teacher asked.

"They're green," several children answered at once.

"That's right. Now let's look at the

different shapes."

"Mine has a point at the top," Jody said.

"Mine has more than yours. Mine has one, two, three points," Billy added.

"Nancy's leaf looks like a feather, doesn't it?" teacher pointed out.

"Mine's full of holes. I can see through it," Kenneth chimed in.

"That's a fern," teacher explained. "It looks like lace."

Wherever the child care center is located, there are objects to be compared. Children in a center near the coast can collect and compare sea shells.

"See how round and flat this shell is," teacher said, calling the children's attention to the shells around them. "Can you find another kind?"

"Here's a skinny one," Luis shouted.

"You can put your finger way inside this shell," Denise told them.

"That's a snail shell," teacher pointed out. "It's really a house for the animal that lives inside."

Talking about food comes naturally at mealtime. What better time to make more comparisons?

"We have two vegetables in our salad today that are alike in one way. Who can find them?" asks teachers.

"Here they are. They're red," grins Debby, fishing out a piece of tomato with one hand and a piece of radish with the other.

"Right! That is tomato." Teacher points to the piece in Debby's hand. "And that is radish. They are both red. Now take a bite of tomato and tell me how it feels."

"Soft. Squishy."

"Now take a bite of radish and tell me how that feels."

"Hard."

After his taste Martin twisted up his face and threw his piece of radish on the table. "Why, Martin, didn't you like the radish?" Martin made another face and shook his head. "Tell me that. 'I don't like radishes, Mrs. Ricardo.' "

Children begin to have likes and dislikes almost as soon as they are born. A baby will spit out one kind of food and open his mouth eagerly for another kind. Some babies love music even when it is loud, yet others cry at loud sounds. A young child may have definite likes but may not be able to put them into words. When teacher told Martin to say, "I don't like radishes, Mrs. Ricardo," she was supplying him with the words that he needed to talk about his preferences.

Some children whose homes do not have a variety of foods or toys may be confused by so many choices. If a child eats hot dogs every day, how can he know whether he likes the taste of chicken? Teacher can help a child with limited experiences get acquainted with different foods, toys, and materials, and learn to choose between them.

Ability to Organize—What happens to all these bits of knowledge that a child picks up every day? What difference does it make if Jon knows that an ant has six legs and likes to eat bread crumbs? Jon may not think about these facts for a while, but they are filed away in his brain until he can use them.

Perhaps a few days later Jon is eating a cookie in the kitchen and drops some crumbs on the floor. "Sweep up the crumbs, please, Jon. We don't want ants in the house," mother tells him. When mother says "ants," Jon's brain automatically sends out the message: "Ants like to eat crumbs. I know because I saw them carrying one to their babies." Jon's knowledge has increased some more. He has added another fact to his brain storehouse. He now knows that ants may be fun to watch outdoors, but his mother doesn't want them in the house.

A few weeks later at the child care center Tracy found a ladybug. "Let's look at the ladybug under this magnifying glass and count her legs," suggests teacher. The children find out that a ladybug has six legs. Jon's brain sends out another message and he tells the children, "Ants have six legs too."

"That's right, Jon," agrees teacher. Ants and ladybugs are insects. All insects have six legs. Let's go back in the play yard and see how many other kinds of insects we can find."

Juan found a beetle; Georgine found a praying mantis; Audrey brought in a moth; and Joey tried to catch a fly, but squashed him. They put each insect in a baby food jar with holes punched in the lids and gave them some leaves to eat. The next day Carolyn brought in a firefly.

The children looked closely at each bug. They noticed that the beetle had a hard

brown back. They saw that the praying mantis had big legs in the back and small ones in the front that made him look as if he were praying. They all looked at the powder that rubbed off on Audrey's fingers from the moth, and they looked at the transparent wings on the fly. They thought the firefly was extra special because it was the only bug with a light.

With teacher's help they talked about how the insects were alike and how they were different. They talked about insects that are useful, like ladybugs, that eat aphids which eat plants in the garden, and bees, which make honey. They also learned that some insects, like bumblebees, sting. Teacher brought in some ant eggs she had found in her garden, and they talked about how insects have babies.

By looking and touching and comparing one insect with another the children began to sort out many facts about insects. They also began to see that each bug, even though it was different in many ways, still belonged to the large group called insects. They were beginning to organize facts. This ability to select and organize facts into meaningful groups helps a person to think through problems.

Another group of children kept a record of the different kinds of birds that came to eat at their feeder outside the window. Whenever they saw a new bird, they would find it in their bird book. Teacher would write the names on a piece of poster paper which the children decorated with cutout pictures of birds.

Ability to Anticipate Results—Julio and Adrian were seesawing. While Julio's end was up, Adrian decided to play with a wagon and got off. Julio came crashing down. Miss Benson was upset and called to Adrian. "You know better than to get off the seesaw and leave someone up in the air. You hurt Julio when you made him fall. Tell him you're sorry and won't do it again." Already frightened at seeing what happened to Julio, Adrian burst into tears at Miss Benson's angry words.

But did Adrian know better than to get off the seesaw? How would he know that Julio's end would crash down unless it had happened to him before? Seeing how upset Adrian was, Miss Benson realized that he had not meant to hurt Julio. She put her arms around the crying boys.

"Let's sit down and talk about what happened," she suggested gently. "It takes two people to seesaw . . . . two people about the same size like you boys. You were able to ride up and down on the seesaw because you balanced it. That means that when Julio went down, Adrian went up. When Adrian went down, Julio went up. But when Adrian got off, there was no big boy at the other end to hold Julio up. Nobody can just stay up in the air with nothing to hold him up. So Julio fell down."

In the woods children learn by looking, smelling, touching, and feeling—combining all the senses in new experiences.

Miss Benson took the boys over to the seesaw. "You get on that end, Julio, and you get on this end, Adrian. I'll show you how to get off next time so that nobody will fall and get hurt." She showed them how to step off and hold the end of the seesaw steady until the boy on the other end got off safely. Then she called the other children and showed them too.

Then, teacher built a tall tower with blocks. "Now, I want Randy to pull out the bot-

tom block." Randy did, and the tower fell down. "I'll build it again. Now, what do you think will happen if Randy pulls out the bottom block again?"

"It'll fall down," shouted the children. After seeing it happen once, they could anticipate the results.

After all the children built their own towers and made them fall by pulling out the supporting block, Miss Benson said, "Remember, that is what will happen to you if somebody gets off the seesaw and leaves you up in the air."

At one child care center patients at a veterans' hospital built a sandbox for the play yard. The children saw the lumber being carried in. They watched the boards being nailed together. When the sand was delivered, they were happy for they realized the job was almost finished. The teachers felt that the children had a greater understanding of how things are made as they watched a useful piece of equipment grow from a pile of lumber.

Making pudding or watching the cook bake a cake can help the children understand how one step follows another to produce the desired results. Teacher must be sure to explain each step. "First, we open the package of pudding and empty it into the pan. Then we pour in the milk and stir it carefully to mix the pudding with the milk. Let's each take a little taste now. What does it taste like?"

"Like candy," one child said.

"Yes, it's sweet like candy. That is because there is sugar in it. Now, we'll cook it, but we have to keep on stirring so it won't burn."

The children took turns stirring the pudding.

"See," said the teacher. "It's getting thick. That's because there is corn starch in it, and corn starch gets thick when it cooks."

Four-year-olds with help may be able to make pudding without using a packaged mix. They will learn more about what goes into a pudding if they can measure out milk, corn starch, and sugar themselves. They also learn that they must follow directions if they want a successful result.

Often children are unintentionally naughty because they cannot anticipate the results of their actions. Lisa wants to crawl into the doll's bed and sees no reason why she shouldn't until teacher explains that "The little bed is just for dolls. It isn't strong enough for a big girl like you. If you get in, it will break."

A child who has some idea of causes and results may be more cautious for he knows that when he runs without looking he is likely to bump into something. If teacher explains why he got hurt, it will help him to remember next time.

Ability to Solve Problems—After the children had been collecting insects for two days and had jars filled with many kinds, it was time to decide what to do with the live insects. Several had already died. Teacher used the discussion to review some of the facts they had learned.

"Last night Juan's beetle died. I'm afraid we didn't give it the right kind of food to eat. Today we'd better decide what to do with the insects that are left. Does anyone have a suggestion?"

"I'm gonna step on 'em all," growled Juan, who couldn't understand why his beetle had died while some of the other insects were still hearty.

"Put them in a cage and feed them every day," piped up Carolyn.

"No gotta right food. Them'll die too," predicted Joey.

"What kind of food do insects like to eat?" teacher wanted to know.

"Ants like bread crumbs," Jon called out.

"Ladybugs eat other bugs," added Tracy.

"Bees eat honey," chimed in Marianne.

"So insects are like children. They eat many different things, don't they," observed teacher. "Where do they like to live?"

"In trees."

"On bushes."

"In the ground."

"They live in many different places, too," teacher said. "Do you think they can live long in a jar in this room?"

"No. Them'll all die," Joey exclaimed gloomily.

Guided by teacher's questions, the children talked about all the things they knew about insects. The facts they learned told them that the insects would die if they stayed in the jars. The children solved their problem by deciding to turn the insects loose in the play yard.

Teachers can take advantage of every-

day happenings in a child care center to pose problems for the children to solve. "Yesterday our baby doll's dress got torn. Now she hasn't got any clothes. What shall we do?"

"Wrap her up in a blanket," suggested Marie, who had a baby sister at home.

"Sew up the hole," George said.

"I'm afraid there are too many holes to mend," teacher told them.

"My mommy makes dresses for me," Kate said. "She'll make a new dress for our doll."

"You ask her when she comes this afternoon," teacher told Kate. "If she says 'yes,' you may take the doll home with you."

Teacher could have found another doll's dress without saying anything to the children. By bringing them into a discussion, she helped them solve the problem themselves.

Ability to Make Plans—The child care center was going on a picnic. One teacher decided her children could help plan the day.

"Has anyone been on a picnic before? What do people do on picnics?" teacher asked to start off the discussion.

"Eat hot dogs," Salvadore called out.

"Eat ice cream," Julie added.

"Cook will take care of that. I mean, what games do people play on a picnic?" teacher explained.

"Ball," said James.

"Yes, that's a good game for a picnic. We must remember to take a ball with us."

"Ride bikes," suggested Ginny.

"Well, we have to go in a bus," teacher pointed out. "Bikes take up a lot of room. Maybe we'd better think of something smaller to take."

"A bucket to carry things in," chimed in Angie.

"That's a good idea," said teacher. "We may want to bring back some pretty flowers or leaves or pebbles. Maybe we can take our magnifying glass too in case we find something new to look at." She wrote down the items they decided to take and pinned the list on the bulletin board so they would be sure to see it the next day.

When children help to make the plans, they are more likely to cooperate in carrying them out. The group can plan how to entertain a visitor or how to celebrate a holiday. They can even talk about what they will do on the first snowy day or what games they will play outdoors when the weather clears up.

Ability to Choose—In making plans the children talk about the choices that are open to them. They go over the possibilities and choose what seems to be the best action to take.

"When Dr. Turner comes to see us tomorrow, where shall we ask him to sit?" teacher asked.

"There in the sun," suggested Terry, pointing to the window.

"No, it's too hot," Billy argued.

"Maybe he likes fish. Put him there," Donna pointed to the aquarium.

"Then he can't see me build a rocket," Carlos objected.

They decided to put a chair at the end of the room divider so Dr. Turner could see on both sides of the room.

Being able to make sensible choices is important in learning. When the group discusses a problem and makes a decision, it gives each child experience that will help him make his own choices in other matters.

Even young children, who are told what to do in most circumstances, must be able to choose intelligently what to do with free time. Every good child care center allows some time every day when the children may do what they want, as long as they don't hurt or disturb the other children or harm themselves. During free play the children are encouraged to try many different activities. Choices come easier as the children become familiar with the materials and playthings available.

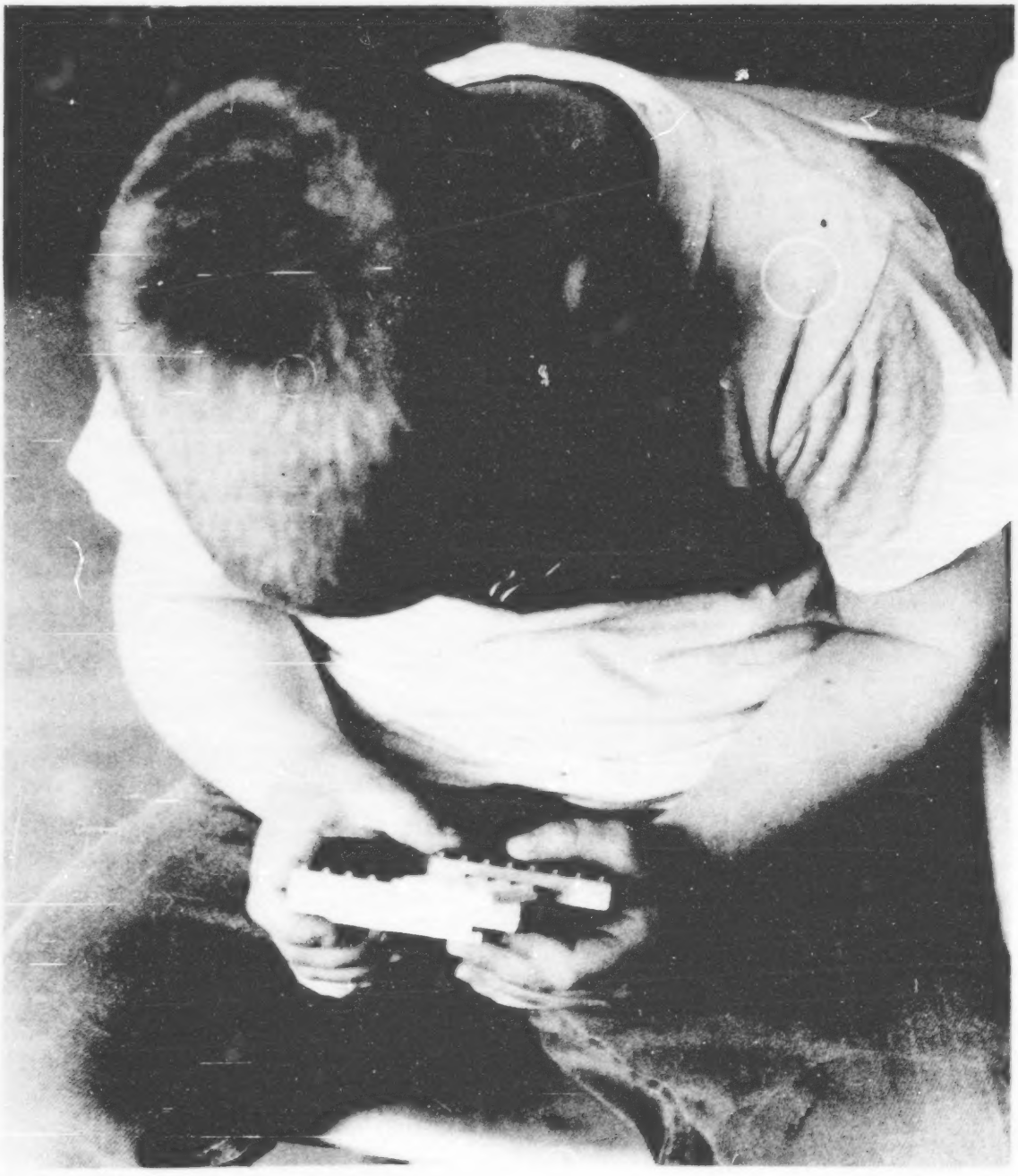
Interest in one activity may continue for several days. Tinkertoys occupied Marty and Nick every day for a week. Whenever teacher told them they could do what they wanted to, they ran to the Tinkertoy box. Every day their structures grew bigger and more complex. On Monday they built a boat. On Tuesday they made a boat with guns like one they had seen on TV. On Wednesday they figured out how to put wheels on the boat to make a car. By Thursday the care was lengthened into a bus. Friday's building was a bus with wings or an airplane.

Teacher wanted them to know she noticed their hard work. "What good builders you boys are. You've worked every day this week and look at the fine airplane you made today."

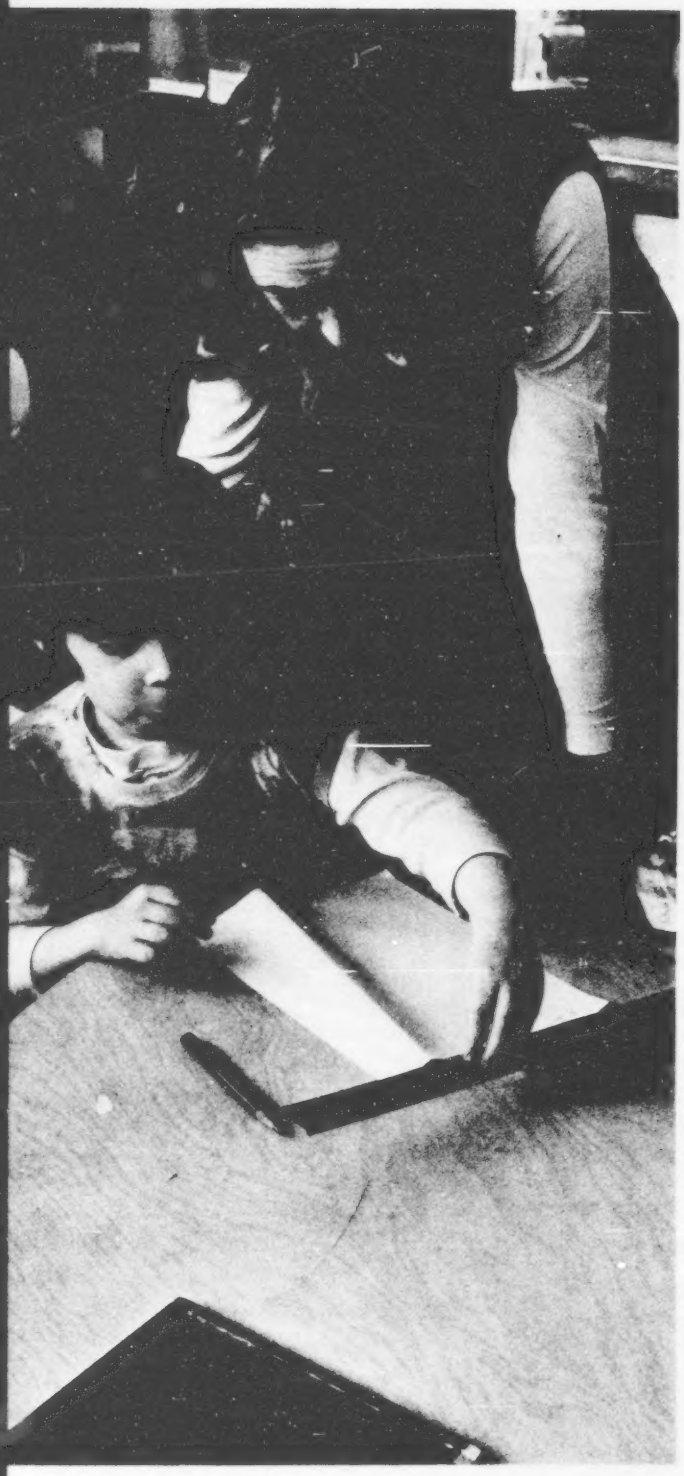
When Monday came again, Marty and

Nick were ready to choose another activity during free time.

Teacher could see that Marty and Nick were learning something new every day they worked with Tinkertoys, so she left them alone to develop their ideas. However, she grew concerned when she saw Robyn building the same wall with Lego blocks day after day. Instead of making a real choice of what to do, Robyn seemed to be avoiding the challenge of trying something new.



Solving problems is an important part of learning.



Children feel more secure at the center when parents take an active interest or help out as aides.

"Let me sit down next to you, Robyn, and see if we can make something else with those blocks," teacher suggested. "If we put the pieces together like this, we'll have a dolly's chair, won't we?"

With teacher's help, Robyn began to see that she could make many things with the same blocks. Several days later when she felt competent as a builder, she was ready to choose another activity.

Some children are too shy or anxious to be able to make a choice. They may feel that they do not know enough to choose the right thing. If they have always been told what to do at home, they may not even understand that they are expected to make a choice. Teacher can show an uneasy child that there are no right or wrong choices. Working a puzzle is as good a choice as painting. When teacher appreciates his choice, the child feels more sure of himself.

What Is Thinking?—"Put on your thinking caps," a teacher may tell the class at the start of a test. "THINK" commands a sign at the check-out counter in the grocery store. "I think . . ." is a phrase people use all the time. But what is **thinking?**

Thinking is solving problems. It is making plans. It is choosing the best course of action. Thinking involves looking at as many facts as we know about a subject, asking questions, finding answers, and reaching a decision. Thinking is involved in all the cornerstones of learning we have been talking about.

The child care group that decided to put the insects back into the play yard thought about the problem and found a solution. The children were thinking when they planned what they would take on a picnic. They studied all the possibilities and thought out the best place for Dr. Turner to sit.

Young children can think very well if the grownups around them show that they expect them to. In each situation the teacher could have done the thinking for the children and told them what to do. Unfortunately, this is often the case when parents and teachers deal with young children. They make the decisions because they feel children are too inexperienced to have good judgment. But it is better for the development of children's minds if adults tell them what the problem is and ask the children to help solve it.

Naturally, children need guidance. They need someone to point out facts that they do not know or to lead their thinking into other directions. The teacher did this in the discussion about the picnic when she explained that tricycles were too big to fit in the bus.

Young children can learn to think. Grownups can help by:

—giving children many different experiences so that they build up a store of facts about many subjects

—talking about problems they can solve

—asking them to make choices

—expecting them to have logical reasons for their decisions

—never, never laughing at a child's solution to a problem.

Point out facts that he might have overlooked or explain where he did not think logically, but never make fun of his efforts to think.

Ability to Adapt—Scientists tell us that the mighty dinosaurs of prehistoric times died off because they could not adapt to the changing conditions on earth. Sometimes it seems that some human babies and young children will meet the same fate. "I can see Jamie going off to school in diapers," or "I believe Susan will carry her baby blanket on her honeymoon," some mothers have said in despair that their children were not giving up their babyish habits soon enough.

Yet man is one of the most adaptable creatures on earth. He can live in many different climates if he learns how to protect himself from cold and heat. He can live on many different kinds of food. Astronauts have lived for weeks in a crowded space capsule, eating specially prepared food and floating about in the weightlessness of space.

Men and women can and do find ways of adapting every day to changes in their lives. People are happier when they can cope with changes. The blacksmith who learned to be an auto mechanic led a more satisfying life than the one who spent the rest of his days complaining that the automobile ruined his business.

As they grow up children have to adapt to many new situations. One of the hardest times for a young child is when mother brings a new baby home from the hospital. Other difficult times are leaving home to attend a child care center, or getting used to a new teacher, or moving to a new home. Children need special attention at these times. (See **Caring for Children,** Booklet 3, "Preparing for Change.)

In addition to such major changes, there are everyday situations that call for children to adapt. Jerry needs to wash his hands, but Barbara is already using the sink. Randolph wants to paint, but Barney is at the easel. Paula can't see teacher because Russell's head is in the way. Children who have learned to adapt will find a peaceful way to handle such situations. Those who cannot adapt, are likely to attack the child who is in their way.

The teacher can help young children adapt to new situations. "Ask Barbara to move over and let you share the sink with her," she may suggest to Jerry. "Barney is painting now, Randolph, but you can draw with these crayons until he is finished at the easel." Or, "Move your chair over here, Paula, then Russell's head won't be in the way."

Children who are able to adapt are willing to accept a substitute in place of what they want. The child who has enjoyed doing many things does not need to depend on a particular toy to make him happy. With the variety of materials in a child care center, a child can learn there are many interesting things to do.

Often children can cope with new situations themselves. When they do, they need to know that they are doing the right thing. When teacher notices and shows her approval, the child is reassured and strengthened in reaching good solutions. "Vicki, that's a good idea to put on your sweater if you're chilly." Or, "Anthony, I saw you ask Jose to play ball with you. That was much better than grabbing the ball from him."

Some children with good imaginations can be most helpful in finding substitutes. Vincent tried to snatch a wagon away from some other children so that he could play school bus. Teacher was about to step in and offer him a car instead, but Luis took hold of Vincent's arm. "We don't need that," he said. He put a wooden helicopter inside the cubby hole under the climbing platform, turned the helicopter on its side, and spun the propeller like a steering wheel. "School bus," he cried. "Time to go to school." Not only Vincent, but the children playing with the truck piled in behind Luis for a new game.

Teacher showed the children what a good idea it was by joining the game herself.

"Well, here are my children at school this nice morning. Let me help you jump down from the high step. What a good driver you are, Luis."

Ability to Create—When an artist puts his brush to a canvas to paint a picture and a writer taps out a story on his typewriter, they are creating. When they are finished, they experience a sense of satisfaction. The three-year-old who pours and pats wet sand into a birthday cake and the five-year-old who builds a skyscraper out of blocks are also creating. They, too, feel the same satisfaction when they look at the results of their labor.

Young children by nature are creative. Their world is full of interesting objects that they can punch and pull, twist and fold, paint and paste. They want to see what happens when they step on a ball of clay. They are thrilled when they accidentally touch yellow paint with blue paint and produce green. The things that are old stuff to adults are new and exciting to children.

Adults must encourage children's desires to create, for creation leads to new learning. Craig discovers that he must use wet sand to mold his cakes. Gretchen compares the sizes and shapes of the blocks and learns to choose the ones that will make the skyscraper look the way she wants it. Adult approval helps both children to continue to try new things.

Unfortunately, some adults judge children's work by their own standards. If they show disappointment in the child's efforts, they may kill any further desire to create. When Sally first paints, she is likely to get too much paint on the brush so that it runs down the paper. Her painting may only be lines of color, but it is something that she created herself, and she is proud of it. Teacher can encourage her if she tells Sally she likes her work. "What pretty blue lines you painted, Sally. Let me print your name on the corner and hang your painting on the wall." Sally will soon be ready to try to paint other shapes and colors.

Group collages made from odds and ends—magazine clippings, leaves, seeds, flowers, paper clips, rubber bands—almost anything that will stick to paper with glue—are one way of helping children discover that they have the ability to create something. With modeling clay, their hands can give shape to ideas that may not be clearly formed in their minds.

Teacher's role in helping a child learn to create is to provide the materials and then keep quiet when the child begins to use them. If the child seems bewildered or afraid to try anything, teacher may show how clay can be twirled into balls or twisted into rolls. She may demonstrate how to wipe the tip of the paint brush against the edge of the jar to remove the excess paint. But she doesn't make finished objects for the child to copy. Part of the act of creating is the good feeling that comes from making something by yourself.[1]

Making up stories, songs, and poems also gives room for children's creative ideas. Any event can be the subject. One group, with teacher's help, made up a poem about mothers and another about fathers. Teacher mimeographed the poems, and the children pasted them inside the cards they made for Mother's Day and Father's Day. Every group usually has some imaginative children who can keep a story going or can dream up words for songs. Teacher may have to start them off, but once they catch on, they often have excellent ideas. A song-writing session might go like this:

"I think we could make up our very own song about the snow," teacher told the children, who were seated in a circle. "Here's the first line." To the tune of "Mary Had a Little Lamb" teacher sang:

"Snow flakes falling to the ground, to the ground. . . . . .

Now, who can think of the next line?"

"Big and round, big and round," Charles called out.

"That's good. Let's sing those lines together." She led them:

"Snow flakes falling to the ground, to the ground,

Some are big and some are round. . . . .

Now, we need a last line. Who has one?"

"I like snow," Sam declared.

"Yes, our last line could be: And we all like snow."

"Let's sing it from the beginning."

1. Ruth M. Hartley and Robert W. Goldenson, **The Complete Book of Children's Play** (New York: Thomas Y. Crowell Co., 1963).

setting the stage for learning

Good Health—Alert minds and healthy bodies go together. A sickly child may not have the energy to bounce from one activity to another like his healthier playmates. As he watches from the sidelines, they move ahead of him in learning new skills.

Good health depends on a number of things: Does the child get enough of the right kinds of foods to eat? Are infections promptly treated? Are his body and clothing clean? Have physical handicaps been corrected? When a child is burdened by poor health, he doesn't have much energy left for learning.

Poor nutrition saps the strength of many children and adults among low-income people. Studies in America and in foreign lands have shown that when children are given even one slice of whole grain bread and a glass of milk in the morning, their school work improves. Every child care center has a responsibility to supply the body-building foods that might be lacking at home. Many low-income diets consist largely of starchy foods. When protein, vitamins, and minerals are in short supply, the body cannot develop and function properly. Snacks of fruit juice or milk with food supplements added should be given instead of artificially flavored sweet drinks. Cookies can be made with wheat germ and other whole grain flours to provide more nourishment than most commercial cookies. Whole wheat crackers are better for children than white crackers.

Every child should be given regular medical examinations, including dental checkups, so that problems can be detected and corrected early. In fact, doctors now think that some learning and behavior problems are the result of difficulties before birth, during birth, or immediately after birth. If every expectant mother receives good medical care during her pregnancy and her newborn baby also receives good care, there may be fewer problems to deal with when children get to school.

Often a child will appear to be retarded, but a medical examination will find that his eyesight is poor or his hearing weak. When these deficiencies are corrected by glasses or a hearing aid so that he is able to see and hear what is going on around him, he may turn into a bright child. Speech difficulties also can be helped with therapy.

Good child care means good health care for children. It means checkups by professionals, but it also means teaching children why they should wash their hands before eating or after going to the toilet and why they should brush their teeth. Teachers must concern themselves about the children's bodies as well as their minds.

Success—The children were making their own Christmas cards by cutting pictures from used cards and pasting them onto construction paper. Stevie decided to cut out a reindeer. His little fingers fumbled with the scissors, and he cut off a reindeer leg. Teacher could see he was getting frustrated at his own clumsiness. She found a picture of a Christmas tree with straight lines and tactfully suggested that Stevie cut that out. He was able to handle the simpler lines of the Christmas tree and made a card that he was proud of. If teacher had not wisely given him an easier job to do, Stevie may have thrown the scissors down in disgust and given up the project.

When children must try too hard to keep up with the others, they begin to worry that they won't succeed or that there is something wrong with them. No one can think clearly when he is worried. Children who are troubled about something cannot put their full attention to learning.

It is important that every child succeeds most of the time. The tasks set before them must be within their abilities. This means finding easier projects for some children and more challenging projects for others. Teachers need to think about each child—what he can do now, what he needs to learn next, what his strengths and weaknesses are. The answers to these questions will help her provide opportunities that use each child's strengths and help him to cope with

or overcome his weaknesses.

Freedom from Anxiety—Many things may make a child anxious. There may be upsetting experiences at home that so occupy his mind that he cannot pay much attention to what is going on at the center. Mother may be sick or even in the hospital. His parents may have frequent arguments, and the shouting scares him. The child may be beaten for the slightest reason. His father may have left home, and the child wonders whether he'll ever see him again. One of his parents may be mentally disturbed and find fault with everything he does. His mother may entertain men at the home, exposing the child to too much sex at too early an age.

The child, himself, may have had a painful illness that left him with fears he cannot understand. The child care center may be his first experience with people outside the family, and he worries that mother may forget to come back for him.

It is difficult for teacher to know what causes anxiety in each child, for there are many causes. One teacher wondered why Sandra, who started out being a friendly, cooperative child, suddenly refused to take part in any group games and spent most of her time lying on the floor sucking her thumb. In conversations with Sandra's mother, teacher learned that both mother and grandmother had definite ideas about little girls acting ladylike. When Sandra came home with a knee worn out of her slacks or paint on her blouse, they punished her for behaving improperly. The little girl had decided the safest course was to do nothing.

Most child care centers have regular staff meetings where teachers can discuss each child with the director, social worker, psychologist, and others who have worked with the children, like a speech therapist or pediatrician. When teacher described Sandra's worry about being ladylike all the time, the staff decided that the social worker should call on Sandra's mother and invite her to visit the center to see what goes on that might make a little girl dirty or tear her clothes. After the visit, the director and social worker explained to Sandra's mother how painting and climbing and other activities help children learn.

While teachers cannot control what happens to a child at home to make him anxious, they can strive to keep the atmosphere at the child care center free from tension. Here are some suggestions that Mrs. Anna Ransom of the Family Service Center in Topeka, Kansas offered to teachers:

—Speak quietly and with respect, as with an adult.
—Speak distinctly and simply.
—If speaking to only one child, say his name first and the request or direction afterward.
—State your directions in the positive form. (Instead of "Don't throw water on the floor," make it positive by saying, "Try to keep the water in the sink.")
—Leave the children undirected as much as possible and allow them a great deal of time to do things.
—Keep your voice low at all times.
—Make your movements unhurried.
—Avoid showing fear or anxiety; don't laugh at a child.
—Remember that our aim is to keep a happy, peaceful atmosphere.
—Whenever possible, sit down to give the children the impression of ease and quiet.

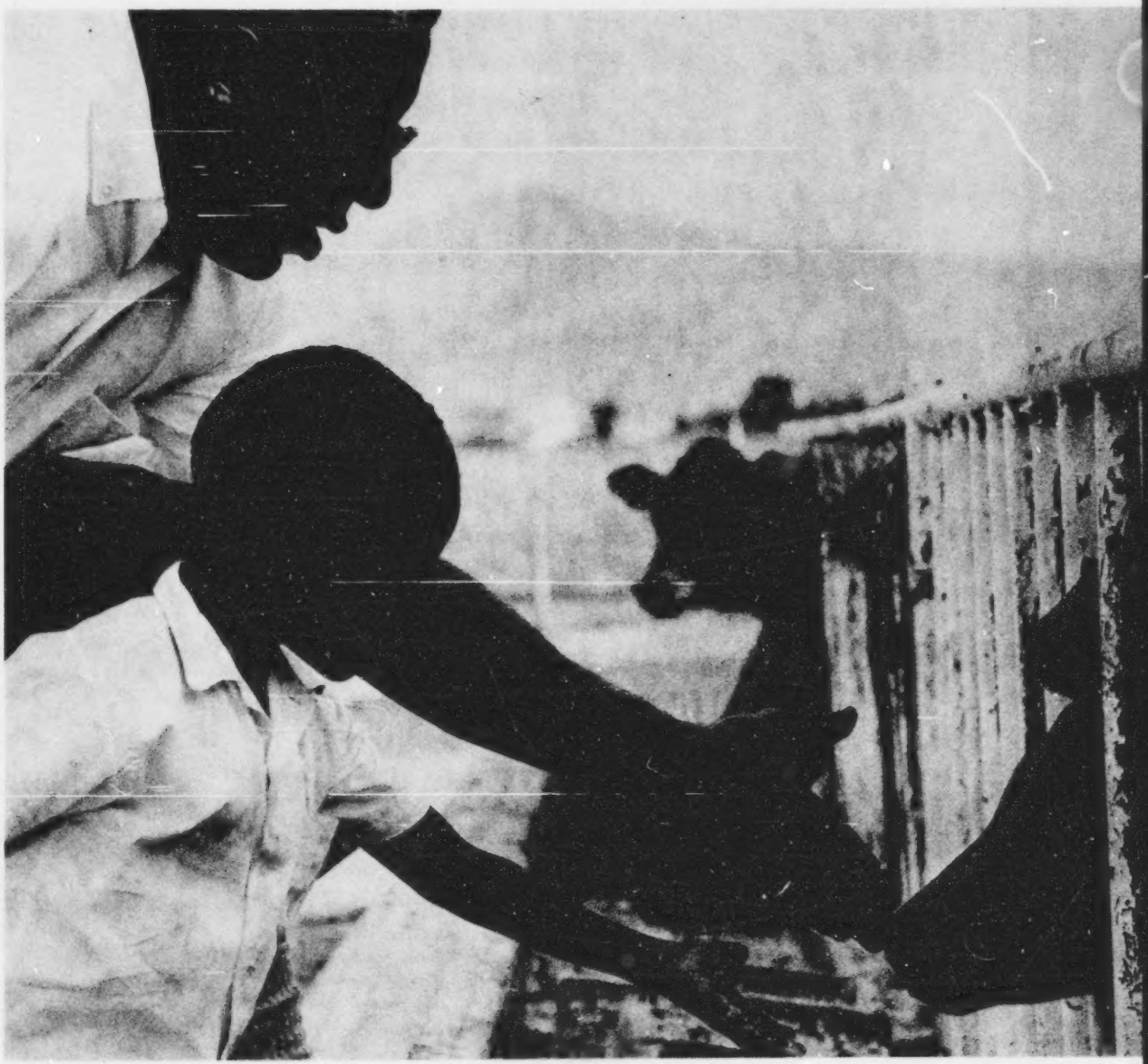
Prevent Distractions—Watch a group of children listening to a story. Most of them will have their eyes glued to the storyteller and are unaware of anything else in the room. These children are able to concentrate. However, in every group there are a few who may enjoy the story, but who are easily distracted. If the child next to them moves, they look at him. If someone opens the door, they look to see who it is. If a fly buzzes around the room, their eyes will follow the fly. By the time they tune in again to the story, they have missed so much that it no longer makes sense. They are likely to spend the rest of the story hour rolling on the floor, kicking their feet, and making it difficult for the other children to hear.

The **way the furniture is arranged** in the room can cut down on interruption that take a child's attention away from his work. Mario was full of ideas about building a super highway when he got out the blocks. Then Janice pushed the doll buggy into his bridge, so he had to repair it. A stray beanbag hit him on the head, and he had to stop to watch the game. When Miss Jameson

asked him to move his highway into the corner so it would be out of the way, he put the blocks away without finishing. If the room had been arranged so that he could build without intrusions, Mario may have experienced the satisfaction of seeing his highway completed. (See **Caring for Children,** Booklet 6 "A Setting for Growth.")

Too many visitors may be distracting. Some child care centers attract many people who want to see the children working and playing under normal circumstances. However, when a group of strangers crowds into a room, the circumstances no longer are normal. The children stop what they are doing to look at the visitors. If such visits happen often, the center might consider installing a one-way viewing glass so that observers in the next room can see in but the children cannot see out.

Children become restless when they



Parents who provide their children with interesting experiences help the learning process.

Flexibility in routine helps children to be flexible.

have to **wait too long.** If teacher has planned an art project, all the materials must be ready to be used as soon as she tells the children about it. If they have to wait for her to find the glue or cut out flowers before they can begin, some will lose interest and wander off to do something else. Teacher often come early to arrange materials so there is no delay.

Too much noise can be distracting to some children. A boisterous child may overwhelm the quieter children around him so that they cannot concentrate on their own work. If the room is **chilly** or the **lighting is poor,** the children may have difficulty keeping their minds on what they are doing.

No teacher can eliminate all distractions. If she keeps in mind that a child, like an adult, can lose his train of thought when he is interrupted or uncomfortable, she can make small changes that will improve the conditions for learning in her room.

She can see that the books are in a quiet corner while the block building and housekeeping areas are separated from the places where children play active games. Teacher may find that the noisy child is calmer if he sits near her. She may not have the authority to order new lights or to turn up the heat, but she should report these conditions to the director. In the meanwhile, she can rearrange the furniture to take advantage of the available light. If the room is too cool she can ask parents to send sweaters for the children to wear indoors; or a local church or service group may be consulted about the need. Families with children often are happy to pass on outgrown sweaters and other clothing. If teacher she can keep distractions down, she will make the room a better place in which to learn.

Flexible Schedule—A good teacher begins each day with some plan for activities, but is willing to drop her plans when an unexpected learning opportunity comes along. Orlando brought a turtle he had found on the morning that Mrs. Horner had everything ready for dyeing Easter eggs. The children were so excited about the turtle that Mrs. Horner knew they could not settle down to egg decorating right away. She changed her plans so that the children could go outdoors early and build a run for the turtle. Later, when they had satisfied their curiosity about the turtle, they were ready to dye eggs.

Young children need a fairly fixed routine, but not a rigid one that can never be changed. It is satisfying to them to know what to expect next. This is particularly true for children who come from disorganized homes, where there are no definite times for meals or bed. The child care center can provide this basic kind of order. Lunch should be served on time; buses should arrive and depart on schedule.

Often children who have known little order in their lives do not know what to do with free time. They are likely to run here and there, pulling out toys helter-skelter and accomplishing nothing. They need an adult to sit down with them and direct their attention to a particular activity. These children require a firmer schedule than do children from homes where life is more orderly. Generally the children who are used to order can move independently about the center and choose activities that appeal to them.

However, children should not be allowed to become so set in a certain routine that they cannot accept change. Trips to interesting places and visits from people with special interests add to the children's learning about the world. On such occasions the daily routine cannot be followed. It is best to talk to the children about the trip or visitor ahead of time so they won't become too confused by the change.

Variations in the routine help the children to develop flexibility. A story outdoors under the trees might be a pleasant change. Snack or lunch can be served outdoors once in a while. The schedule can be changed to suit the season —outdoor play in the middle of the day in cold weather and early in the day in hot weather. If the children learn that each day may be a little different from the day before, a major change in schedule is not likely to upset them.

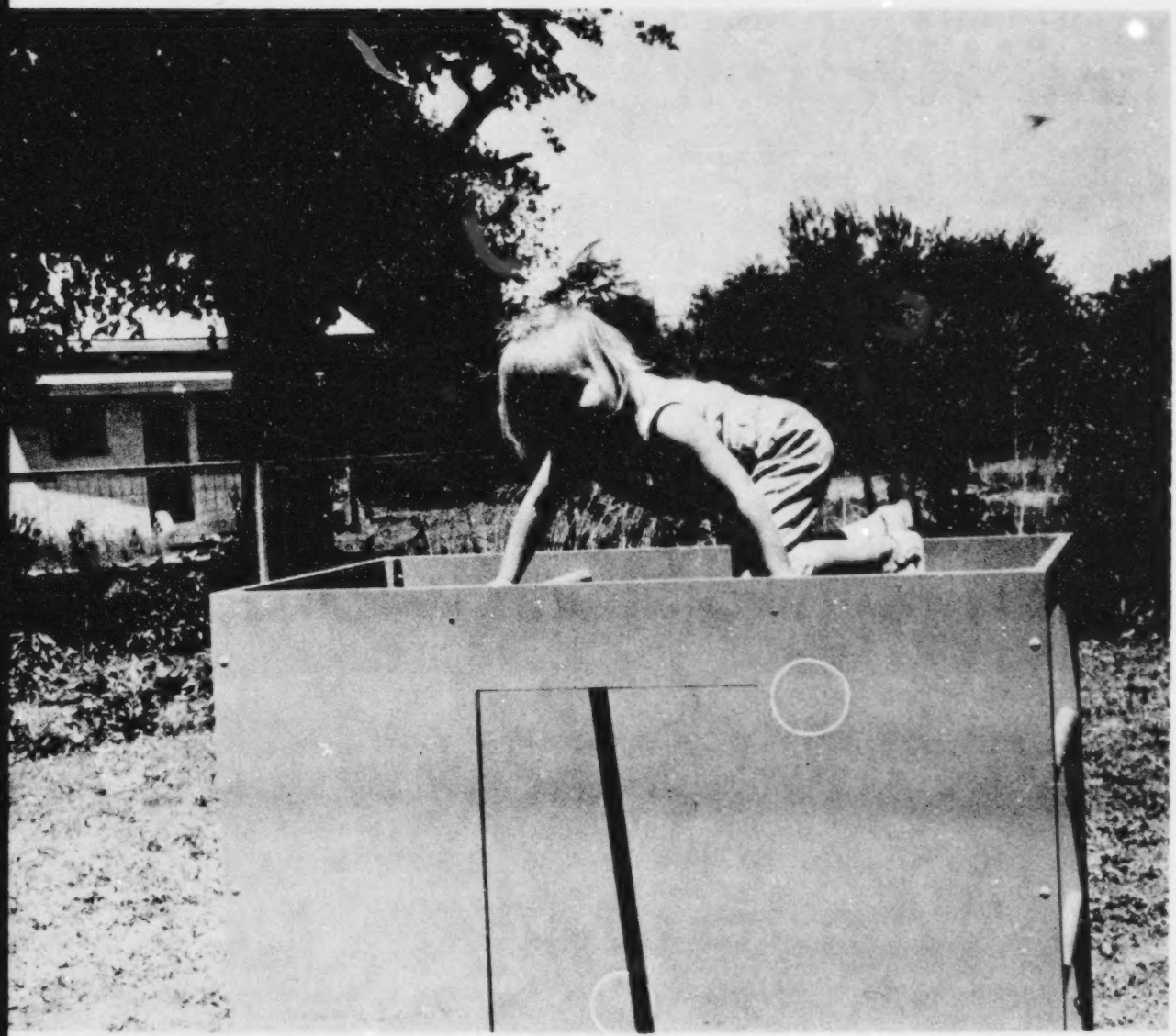
In planning a schedule, teacher will want to keep in mind that children's muscles are still developing. They cannot sit still very long. When children are expected to stay still longer than their muscles will allow them, they begin to fidget. Their minds wander. They stop learning. A wise teacher follows a quiet activity with one that allows the children to move around.

Boredom Is Deadly—The old saying that "variety is the spice of life" is important to remember when thinking about setting the stage for learn-

ing. Day after day with the same toys in the same classroom is like being on a diet of bread and water. Eventually, the children become so bored by the sameness that they stop learning. After all, how many times can you do the same puzzle and still find it challenging?

Teachers can help children realize that there are always new challenges to master and new things to learn. When Kevin learns how to do the five-piece puzzle, teacher gives him an eight-piece puzzle. After Marietta learns to put Lego blocks together for simple buildings, teacher shows her wheels and axles and helps her build a car. A person who develops an eagerness for learning will go on learning long after he leaves school. The time to promote this attitude is in the early years before a child goes to school.

One way to avoid monotony is to keep the schedule flexible. Another is to keep the surroundings interesting. Move the furniture every now and then. Hang up new pictures as the children complete them and take down the old. Change the bulletin board display at least once a month.

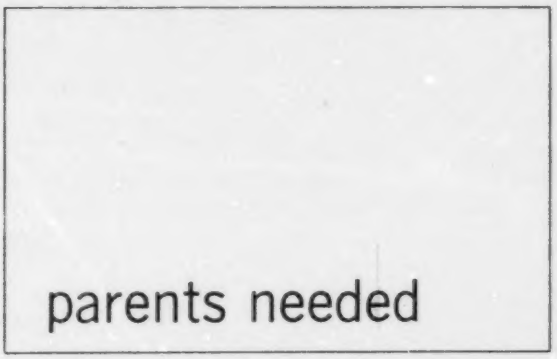


Creating their own designs and structures develops organization.

Change the toys fairly often. A large supply is not needed in the beginning because the room and its permanent furnishings are new to the children. It is wise to keep some items hidden away at first and bring out something new every week or two to refresh interest. A rainy day is a good time to do this. When a new toy is brought out, a famliar one may be put away for several months. It will seem new to the children when they see it again.

Think of new subjects to talk about. The children have many experiences outside the center. Ask them to tell about the new baby at home or the police dog that lives next door. Teacher might tell the children about happenings in her own home. Many young children think their teacher is always at the center and has no life away from them.

Materials used for creative projects, that is paints, crayons, paper, paste, clay, and blocks, do not become monotonous. Every time a child creates something, it is a new experience. He may use materials that he has used many times before, but each time the product is different. There is no need to put these supplies away because they never become boring.



Learning Grows at Home—Jack and Mike leave the child care center at the same time every day. On one day Jack's mother came for him, and he held her hand as they walked home together.

"Did you have a nice day, Jack," mother asked.

"Yep. We built a street out of bricks. We ran the wheelbarrow on it."

"That must have been fun," mother said. "There are some bricks under the porch. Why don't you build another street while I'm getting supper. I'd like to see what a good one you can make."

Mike rode home on the bus and ran into his house shouting, "Mommy, Mommy, guess what we made today?"

"Don't bother me, Mike. I'm busy. Go watch TV and keep quiet while I get supper."

Which boy is getting the most out of his experiences at the center? Jack, of course. His family is interested in what he is learning. Jack wants to build another road because he wants to please his mother. He knows she will praise his work, so he tries extra hard to get each brick lined up straight.

Learning cannot be limited to a few hours a day in a child care center. It has to continue into the hours a child spends at home, or he will soon forget what he has learned. When Jack's mother asked him to make another brick road, she was reinforcing what he was learning at the center. In doing it again, Jack was probably able to do a better job. Mike, on the other hand, will have his mind filled with what he sees and hears on television and may not think again of the satisfying things he did that day.

At supper Jack told his father and brothers and sisters about the road he built.

"What color were the bricks," his big sister asked.

"Red," said Jack.

"In library today I read a story about a yellow brick road. It was the 'Wizard of Oz.' "

"Maybe you can borrow the book and bring it home and read it to Jack," father suggested. "I've never seen a yellow brick road. But when I was a boy, I lived on a street made of cobblestones. They were hard to walk on."

This began a family conversation on the materials that streets can be made of. The next evening everyone looked at a picture of the yellow brick road. Jack's sister read the story. His road building game at the center had turned into a family happening.

When older brothers and sisters read or play games with young children, it usually results in learning for both children. Jack's sister improved her reading ability at the time she was helping Jack.

Jack's family valued learning. The parents shared their knowledge with their children. They encouraged them to discover new things, to talk freely, and to read books. With models like

this to copy, Jack and his brothers and sisters are likely to continue to learn the rest of their lives.

Parents at the Center—All good child care centers welcome parents. The directors and teachers know that unless parents support the work of the center, the children are not going to learn very much. Parents have to strengthen the center's efforts by providing an atmosphere of learning at home.

"But I'm not a teacher. I haven't had much education," a mother or father may say. "How can I help my child learn?"

Many things young children need to know do not come out of textbooks. They come out of life. Most parents can and do share a great deal of knowledge with their children. However, some parents are less confident. They need assurances that they can do a good job of rearing their children. The child care center can help them gain the confidence they lack.

First of all, the parents may need to come to the center. Many are too shy to visit. They drop their children at the door and leave quickly. Some parents feel that they do not know enough to talk with the teacher about their children.

One center, which was fortunate in having a large kitchen and a cheerful cook, started by inviting parents to drop in for coffee. There were no speeches. The director and teachers went about their business and left the parents free to get acquainted with one another. As always happens when parents get together, they began to talk about their children. The parents felt at ease with the cook and kitchen helpers. Soon they began asking questions about what their children do at the center.

Through the cook, the parents asked the director to have coffee with them. She answered their questions and suggested that the children might be pleased if they watched them play for a while. On a later day, the parents ate lunch with their children.

The parents who met over coffee in the kitchen eventually formed a Parents' Club with regular meetings. They wanted to know more about caring for their children. The center invited people to talk with them about many subjects that the parents wanted to learn about:

—preparing nutritious meals
—where to get free physical examinations and why they are important
—why expectant mothers need better food and good medical care
—family planning
—how children learn to talk
—the things children learn in the center
—what kinds of toys help children learn and which can hurt children
- where to buy good materials cheaply for childrens clothes

There were conversations, films, slides, and visits to places like the County health clinic and a mill-end fabric shop.

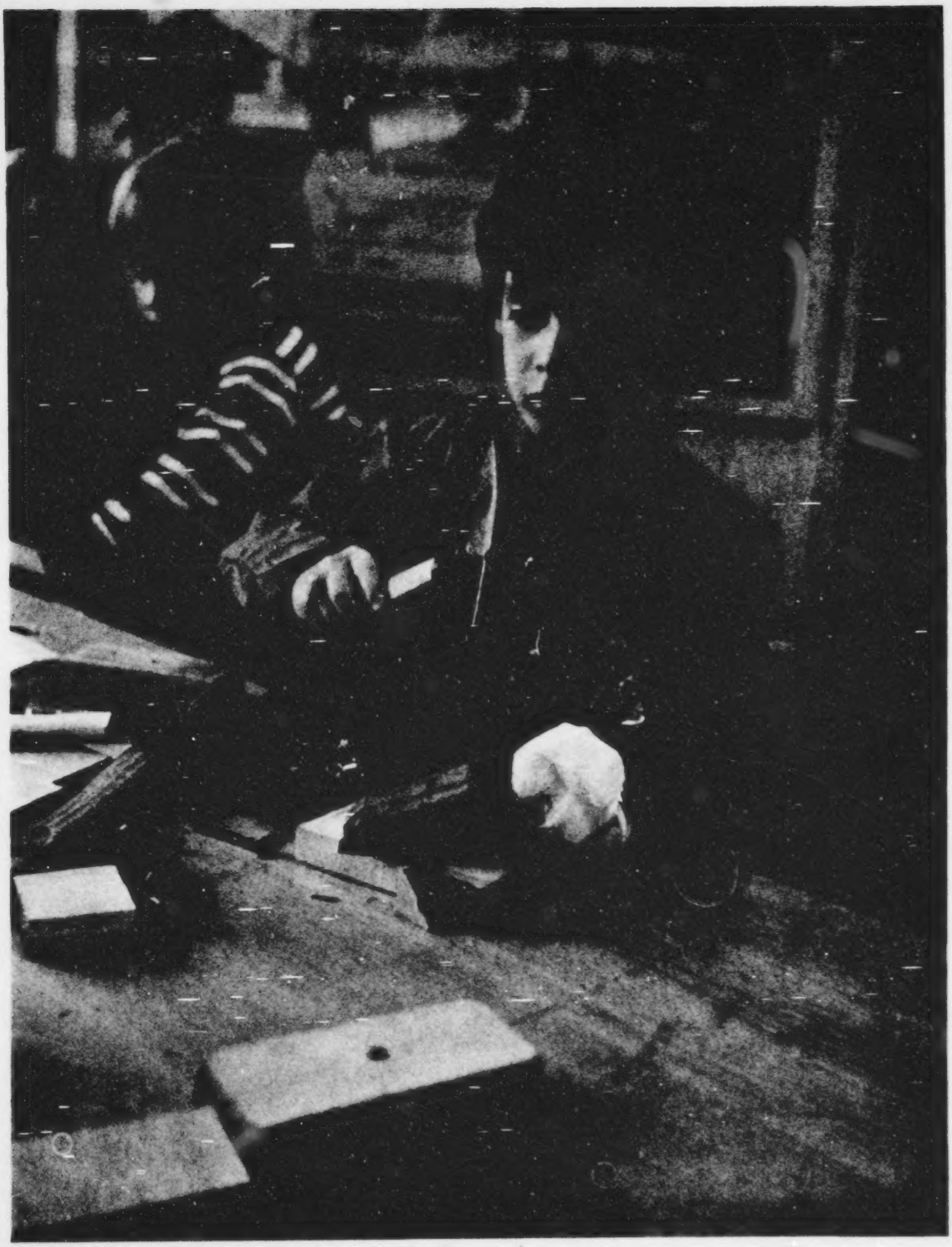
As the parents felt more at home in the center and talked freely with staff members, they began to see what they could do to make the center a better place for their children. They set up a workshop in an extra room. A neighborhood store donated a sewing machine. Soon mothers were busy making curtains, dolls' clothes, and aprons for use at the center or clothing for their own children. Not to be outdone by the women, a group of fathers built toys using their own hand tools and ends of lumber.

At the parents' suggestion, the center agreed to lend out some materials. The parents could take home a puzzle, or magnifying glass, or book to use with their children during the next week. They also visited the local public library and looked over the collection of children's books.

One teacher who had an exceptionally interested group of parents, wrote out projects to be done at home by parents and children working together. Any materials needed could be borrowed from the center. One project was to find five different kinds of stones. Another was to make a collage of scraps of cloth. The glue, paper, and cloth all were available at the center. Soon parents were thinking up activities of their own and sharing them with the teachers and other parents.

Through participation like this, parents become aware of ways they can help their children learn. At the same time, they begin to understand that by their own actions they can improve conditions for their own families.

The children enjoy the new companionship with their parents. The things they do every day at the child care center have a new meaning for them because mommy and daddy are inter-



Healthy bodies are important to keep alert.

ested. They now have a greater incentive to learn.

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Some coin banks are protected by locks that will open only when someone dials the correct combination of numbers. The person who wants to open it may have to remember to turn the dial clockwise to 9, then counterclockwise to 1, then clockwise again to 4. No one can open the bank unless he knows that particular combination.

It sometimes seems as if children's minds are locked in a similar manner. There is a special combination that will open their minds to learning. The adults who want to help children learn must first discover the combination for each child. Music may be the key to reaching Christina; games with a ball may make Mickey's mind alert; molding clay or sand or fingerpainting may be the combination that opens Jake's mind to new ideas; and Gina may learn best while pretending to be the mother in a make-believe home.

Once the lock is open, the child's mind becomes alert to new things that happen. Discovery becomes exciting. The child explores new fields and finds that many activities are appealing. Christina leaves the record player and begins to paint. Mickey is able to lay his ball aside while he builds a stadium. Learning has become fun.

Where does the teacher find the combinations to children's minds? They aren't written down anywhere. They come from watching the children closely. If a child is at a center where the conditions are good for learning, where he is able to explore and discover many different kinds of activities, he will choose to do the ones that appeal to him. An observant teacher, seeing what each child likes to do best, will try to reach each mind through its special interests.

But a word of warning. Minds that have been opened do not necessarily stay open. True, once a child has experienced the rewards of learning, he will want to enjoy those rewards again and again. But the mind grows and interests change. The games that were satisfying to a two-year-old may bore a three-year-old. A growing mind needs new problems to solve, new decisions to make, new ideas to explore and express. There must constantly be new combinations to keep the locks on children's minds open. For when there is no longer anything new and interesting for the mind, the lock snaps shut. Learning stops.

This is the challenge of homes, child care centers, kindergartens, and schools: to maintain an atmosphere of learning that is real and rewarding throughout a child's developing years. When learning becomes a part of a young person's life, he cannot be a failure in his own eyes or the eyes of society.

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